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ABSTRACT

This report describes the rationale for competency-based vocational teacher education, and a methodology by which synthesized competency lists for the preparation of vocational and career education personnel at various levels were developed during Phase 1 of a project to examine the applicability of competency-based teacher education to Massachusetts. Synthesized competency lists are included for vocational educators at the teacher, middle manager, and administrator levels. Competency statements are also included for personnel to administer career education programs at the elementary, junior, and senior high levels, including counselors, coordinators, and administrators. Findings and recommendations for the project are presented. The appendixes (more than half of the total contents) include all original sources of competency studies used in this project. (The intention is that the document may be used as a comprehensive compilation of research in this field.) Competency lists contained in the appendixes are as follows: Model Curricula for Vocational and Technical Teacher Education: Performance Elements and Examples of Module Titles and Performance Objectives; For Initial Teacher Preparation in Both Broad-Based Vocational Education and Specific Service Areas; For Middle Management Positions; For Administrative Positions; For New And Related Areas--Career Education, Community College Instructions, Part Time Vocational Education Call Staff, and Vocational Counselors. The career education competency questionnaire is also appended. (TA)

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ANALYSIS AND SYNTHESIS OF COMPETENCIES NEEDED BY VOCATIONAL AND CAREER EDUCATORS: PHASE I OF A PROFESSIONAL DEVELOPMENT STUDY FOR MASSACHUSETTS

Harold S. Resnick
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January, 1977

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PREFACE

This project was undertaken by the Department of Business and Career Education, School of Education, Boston University pursuant to a contract with the Office of Professional Development, Division of Occupational Education, Mass. Dept. of Education. It was funded through Federal Law 90-576, as amended by P.L. 92-318.

The initial development of this project was an outgrowth of a need by the Division of Occupational Education to examine its approval (certification) procedures and requirements for vocational, occupational, and career educators in light of emerging trends in teacher education and professional development throughout the United States. Specifically, the applicability of competency-based occupational teacher education to Massachusetts was to be addressed.

This report completes Phase I of this project and serves as an interim report in this comprehensive effort. As such, the report describes the rationale for this study as well as for competency-based teacher education; a methodology is described whereby synthesized competency lists for the preparation of vocational and career education personnel at various levels was developed. The synthesized lists themselves are presented. Findings and recommendations are included as well.

The extensive appendixes include all original sources of competency studies used in this project so that the user may refer to this document as a comprehensive compilation of research in this field.

The reader should note that the synthesized lists in this document have not yet been validated. Although some content and concurrent validity may be given them since they have been developed from prior research, the actual validation of these lists is currently being conducted and will be reported in Phase II of this project, along with other aspects of this study.

The researchers extend appreciation to a number of individuals for their efforts on behalf of this project. The support of the three Massachusetts Associate Commissioners of Occupational Education under whom this project was conducted is acknowledged: Drs. David Cronin, John P. Manning, and Patrick J. Weagraff. In addition, the efforts of a number of other individuals within the Division of Occupational Education made this study possible. These individuals are: Messrs. Phillip Haight, John Morine, and John McDonagh.

Appreciation is extended also to the Office of the Dean of Boston University and to the Department of Business and Career Education for their cooperation and support beyond the contractual obligations on behalf of this project. In addition, the contribution of Joyce Malyn-Smith to this effort is acknowledged.

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CHAPTER ONE

INTRODUCTION

HISTORICAL OVERVIEW AND RATIONALE

The Office of Professional Development within the Division of Occupational Education, Massachusetts State Department of Education, was first established in 1971 under the auspices of former Associate Commissioner Charles H. Buzzel. The purpose of this Office was to coordinate the approval of Occupational Education instructors throughout the Commonwealth, as well as to administer the funds awarded to the State through the Education Professions Development Act (P.L. 90-35). Prior to the establishment of this Office, the specific supervisor for each occupational area separately and individually approved instructors for his/her respective fields. The need for centralization of this function, as well as standardization of information concerning the approval process and criteria for approval, became clear as the number of vocational instructors greatly increased due to the expansion of regional vocational/technical schools throughout the Commonwealth of Massachusetts.

In 1974, a study was conducted by Mr. John P. Morine, Chief Officer for the Office of Professional Development, and Mr. Lot H. Cooke, Jr. who served as the project director. This study was entitled Professional Development Planning Study (Morine, 1974) and had as its major focus the organization and establishment of a centralized, computerized system for record keeping of occupational education personnel for all those approved instructional and administrative categories identified through Massachusetts State Law identified as Chapter 74. A second purpose of this study was to obtain and make available more accurate and up-to-date information for individual school districts, determine occupational education manpower supply and demand throughout the State on a continuing basis, and provide more consistent and efficient service to individuals entering teacher training programs. This comprehensive study was successfully completed and the data for individuals contained within the files was subsequently computerized.

Since that time, the Office of Professional Development (OPD) has provided clear, consistent, and accurate data regarding occupational teacher personnel. However, the number of individuals applying for approval and the processing of forms related to the various approval factors, technical and pedagogical examinations, and professional development programs during the past years has continued to increase. This increased volume of requests places further demands on the OPD staff for the initial manual processing of applications; designing, administering, and evaluating technical and pedagogical examinations; and coordinating professional development activities at various levels with teacher training institutions throughout the Commonwealth that offer the programs required for full approval. Simultaneously, the continued development and support of projects funded through EPDA awards must be maintained. At this point in time, the staff of the OPD cannot cope with the magnitude of functions that it is asked to perform. This is not a reflection upon the efforts of the personnel in this Office, but rather is a reflection upon the scope of the responsibilities in which this Office is currently engaged.

In addition to the functions stated in the preceding paragraph, several other major thrusts within the Massachusetts Division of Occupational Education, as well as new and emerging national directions for occupational teacher education have developed recently, all of which impact upon the functions and responsibilities of this Office. One of these directions is the Career Education movement, initially established under the direction of US Assistant Secretary for HEW Sidney P. Marland, Jr. Since its inception in 1971, this concept has received widespread acceptance and support, and has grown throughout the nation with almost unprecedented vigor and rapidity. Currently, a National Office for Career Education has been established in the US Office of Education, and a parallel research component for career education has been established in the National Institute for Education (NIE). The career education movement, which calls for comprehensive programs from kindergarten through adult education, blending vocational and academic programs with a comprehensive career development program for a coordinated, unified effort providing career awareness, exploration, and preparation within school systems, has led to a much broader perspective nationally for occupational education. Evidence of the national support of this movement may be seen in the establishment of the first Commissioner's National Conference on Career Education scheduled for November 1976 in Houston, Texas, in which approximately 15,000 individuals are expected to participate.

This broadened perspective for occupational (career) education is consistently reflected in the recently issued Policy on Occupational Education written and published by the Massachusetts Board of Education (1976). Although the term "occupational education" is used in this document rather than "career education", the components of occupational education described within the document clearly encompass and embrace virtually all aspects of the career education movement. The subsequent broad-based delivery systems related to the identification and initial preparation of personnel; professional development on a continuing basis; and leadership development for personnel in occupational education must now be addressed by the Division of Occupational Education, and will most appropriately be designated within the jurisdiction of the Office of Professional Development. Consequently, in addition to the current breadth of tasks to be conducted by this understaffed office, there are now additional functions that must be identified, defined, and developed to provide adequate, comprehensive services throughout the Commonwealth.

In an early identification of this thrust, a needs assessment package for advanced graduate programs focused on career/occupational education was developed and administered jointly by Fitchburg State College and the Department of Education under the Direction of Dr. George B. James, and Mr. Gerard P. Antonellis (James, Antonellis, 1975). Although this data is still being analyzed, the initial results clearly indicate the need for additional programs of professional development at advanced levels to further prepare individuals in academic, occupational, counseling, and administrative roles to meet the needs described in the Massachusetts Policy Paper to provide broad-based occupational education programs for youth and adults in the Commonwealth.

Further relationships of this report to the implementation of the Policy Paper on Occupational Education are addressed in greater detail in a subsequent section of this document.

Along with the career education movement, the Education Professions Development Act (EPDA) has further identified a number of issues to be addressed, and projects to be funded to support professional development across the nation. In keeping with this legislation, the OPD has sponsored a number of EPDA projects throughout the Commonwealth. A review of these projects was conducted by Dr. Robert M. Worthington, of Career Development Associates, Inc., in December of 1975, in which ten EPDA projects in the State of Massachusetts funded under part F Public Law 90-35 for fiscal years of 1972, 73 and 74 were evaluated (Worthington, 1975). At the conclusion of this report Dr. Worthington identified a number of key recommendations that impact significantly upon the long term efforts and activities sponsored by the Office of Professional Development. Following is a brief highlighting of some of the key recommendations of Dr. Worthington's report.

1. A long range plan for occupational education professional development program and activities should be established at an early date.

2. There is no need to postpone planning for professional development while awaiting guidelines from national legislation since the guidelines are usually presented in very general terms, allowing for considerable flexibility at the state level. This planning should be designed as an annual plan for occupational education personnel development and formulated as part of the State Plan for Occupational Education.

3. An Occupational Education Professional Development Advisory Council should be established and judiciously used.

4. The Occupational Education Professional Development Office should be adequately staffed with persons who have strong educational backgrounds and experience in vocational/technical education.

5. The OPD Office should be restructured into branches dealing with:
    a. certification and licensing,
    b. preservice and in-service occupational teacher education,
    c. leadership development (EPDA and staff development at state and local levels)

6. Certification and licensing for Occupational Education teachers and administrators should be decentralized. This could be accomplished by the establishment of approved programs at selected colleges and universities.

7. An effort should be made to recruit women and persons from minority groups into positions of leadership.

8. A comprehensive occupational education personnel development program should be established at the earliest possible date in the City of Boston.

9. Occupational Education Professional Development Centers should be established with a critical mass of occupational education faculty and support staff.

10. Basic financial support must be assured to the institutions which are selected as occupational education professional development centers.

Clearly, the recommendations in the Worthington study address many of the issues in which the OPD in the Division of Occupational Education must currently be involved. These recommendations are broad and comprehensive in scope, but reflect the necessity for comprehensive planning for professional development, as well as a review of current procedures and criteria for personnel approval, examinations, teacher education programs, etc.

Concomitant with the career education movement, and the Education Professions Development Act, a national movement has arisen regarding competency-based teacher education. The rationale for competency-based teacher education is explained in greater detail in Chapter Two of this report. In brief, however, it is based upon the premise that higher quality educational programs can be delivered to students if the teachers are professionally prepared in as precise a manner as possible. This precision is accomplished by first empirically identifying the skills or competencies (in measurable terms) that teachers and other educational personnel need to perform their roles From these identified competencies, the most appropriate delivery system for teacher training and in-service programs may be established. This movement has been positively and consistently advocated within the field of vocational teacher education. Perhaps vocational teachers have embraced the concept of competency-based teacher education due to the fact that historically, vocational education has been based upon the careful analysis of the critical competencies (or trade analysis) derived from the body of knowledge needed to work in a specific trade or occupation.

During the past several years, the efforts of Dr. Calvin J. Cotrell and others have reached fruition in the development of a national model for competency-based vocational teacher education (Cotrell, 1975). This model is currently being implemented in a number of teacher education institutions throughout the United States. A review of the competencies derived from this national effort, coupled with comparative analyses of the competencies required for current vocational teacher approval may lead to suggested plans to improve the specificity of content and design of delivery systems for professional development programs in Massachusetts.

Such a review and analysis would be supportive also of a number of the major recommendations and findings in the Worthington study.

This research study has attempted to review carefully the national research regarding competency-based vocational teacher education, provide a synthesis of these studies, and then compare this synthesis with the current status or programs within Massachusetts, moving toward suggestions to consider in both implementing the findings of the Worthington study, and developing a system for comprehensive state-wide planning for occupational professional development in Massachusetts.

In 1968, a national research invitational professional development seminar was conducted for the purpose of reviewing current issues surrounding trade and industrial teacher education and certification (Reese, 1968). Dr. Robert M. Reese served as the project director for this study and a number of problems and concerns were identified from the interaction of the participants. In the area of teacher certification practices, the report indicated that every state responding to a national survey (46 states responded) had some teacher education programs for trade and industrial teachers. The extent of these programs varied, however, from states providing minimum teacher education offered by the State Department of Education without any college credit, to states requiring full baccalaureate degree programs. Similarly, the requirements for initial preparatory training of teachers prior to their first teaching position in a school district varied from no requirements at all up to sixty semester hours, including student teaching. The diversity was certainly extensive.

An additional lack of commonality and consistency was noted regarding the technical skills required by teachers and the examinations designed and administered to validate these technical skills. Since the Reese seminar was conducted prior to the initiation and completion of the competency-based program identifying the professional skills needed by vocational teachers, a parallel concern was voiced regarding pedagogical skills. From this study, four major critical areas of concern were identified. The first of these concerns was the need to identify those professional competencies considered essential for successful teaching. Since the time of this seminar (1968) much has been done in this field, and is presented in full detail in Chapter Two of this report.

The second critical area of focus identified in the Reese study was the establishment of a model for the measurement of occupational competence. Although a number of institutes have been conducted since that time, as well as many national studies, such a standardized, widely-accepted model does not yet exist. However, a number of vital components have been reviewed and more consistent directions have emerged, based upon competency studies that have been completed, as well as the increased sophistication of the testing processes in general since that period of time. This research study also will discuss the measurement of occupational competence.

The purpose of the third major section of the Reese study was to determine those most desirable pre-service experiences for new teachers. This concern has been addressed through the establishment of several field-based models for teacher education, and a number of currently operational models are described in Chapter Two of this study.

Reese's fourth major area studies the relationship of occupational competence on the part of the teacher to student achievement in the classroom. While this is a significant factor in terms of seeking causal relationships between the level of preparation of the teacher and the ultimate student success on the job, this research study is not directed toward that particular issue.

It is interesting to note as well that the Massachusetts State Department of Education has moved toward competency-based teacher certification and a review of successful job performance through the legislation known as Chapter 847. Although Chapter 847 has not yet been funded, there is considerable likelihood that this will occur over the next several years. Since this appears to be a direction for all areas of teacher and administrative certification, the Office of Professional Development, which approves teachers for all occupational fields, would be very consistent with state direction both in terms of Chapter 847 and the Policy Paper for Occupational Education to consider competency-based programs for the initial approval and continuing professional development of its personnel.

In recent months, two major efforts in addition to this study have been funded by the Division of Occupational Education to help review these national movements, and assist with the development of a state-wide network of teacher training services among institutions of higher education within the Commonwealth. This study, as one of these efforts, assesses the competencies needed by personnel at all levels, with appropriate suggestions related to teacher approval processes, examinations, and professional development. Simultaneously, Dr. George B. James has been funded to work with Chancellor John Hammond of the State College System to design a coordinated system for the delivery of professional development services related to occupational teacher preparation. In addition, under the direction of Dr. Kenneth Ertel at the Center for Occupational Education, University of Massachusetts, Amherst, a Council for Professional Development has been established to develop goals for occupational professional development in the Commonwealth and determine the resources for a strong working relationship between the state college system, other institutions of higher education, the community college system, representatives from industry, comprehensive and regional vocational-technical school districts, and minority groups. It is anticipated that this combined effort may do much to help the Office of Professional Development in implementing further its leadership role for professional development in the Commonwealth.

RELATIONSHIP OF THIS STUDY TO THE POLICY PAPER FOR OCCUPATIONAL EDUCATION

The purpose of this research is to analyze the status of teacher education programs for vocational and career education in the United States and develop synthesized lists of competencies needed by personnel at various levels. This document may then serve as a guide for the Office of Professional Development in its review of teacher approval programs for Occupational Education in Massachusetts. Based upon this competency analysis, appropriate programs for the delivery of needed services may also be developed.

This study is critical for the implementation of the Policy Paper for Occupational Education in several ways. The most single striking quality of the Policy Paper is the breadth of definition of occupational education, extending from the development of appropriate values and attitudes regarding the world of work at the elementary school level to preparation for both generalized and specific occupations at the high school level, and continuing through occupational education experiences at the post-secondary and adult education levels. Vocational Education is, of course, a "discrete and important component of occupational education." (p.1)

Considering the breadth of services described within the policy paper, the general need to expand options regarding curriculum development and implementation, the greater inclusion of career guidance activities throughout the educational continuum, a broader base of occupational preparation, increased cooperation with business, industry, and community agencies, and the more widespread utilization of all aspects of the school utilizing existing resources to redirect many programs toward broad-based occupational education, it is most appropriate that personnel development, leadership development, and continuing staff development be considered essential ingredients of an implementation plan. Surely the most valuable resources of this plan are the human resources already existing within school systems today. However, if these existing human resources are to assist with the implementation of occupational education as defined in the Policy Paper, appropriate professional development activities, as well as a re-examination of the requirements of personnel fulfilling these roles, must be conducted.

In the past, the Office of Professional Development within the Division of Occupational Education has focused extensively upon the delivery of services to vocational teachers in vocational programs approved through Chapter 74 in regional vocational-technical schools, as well as approved vocational programs within comprehensive school systems. As stated in the Policy Paper, "the board recognizes that in the area of occupational education its responsibilities encompass post-secondary and adult education as well as elementary and secondary education."(p.2) Such a statement clearly indicates the need for expanding the scope of this Office to encourage personnel utilization from the elementary school through post-secondary education.

The Policy Paper makes a number of very positive observations and conclusions regarding the current delivery of services. However, the Board notes in observation No. 6 that "the quality of occupational education and its integration into the high school curriculum is often limited because of the inadequate curriculum and staff development." (p.6) Improved curriculum is currently being developed through such programs as project CAREER. However, curricula must continually evolve and be revised to meet local needs. As such, staff within school systems must receive the training to provide such curriculum modification. In addition, the direct issue of inadequate staff development is cited in this statement. One of the purposes of this study is to assist in identifying those critical elements of staff development that are currently not addressed, and to help with the design and possible implementation of models to provide further support for these areas.

Another strong concern of the Board is the need for occupational education programs to "promote opportunities for school staff and community members to become more aware, capable and involved in the career guidance process, and encourage the participation of business, labor, and community leaders in the guidance process, both in and out of school." (p.9) The involvement of such diverse groups is a most difficult task, yet when accomplished, such involvement provides virtually unlimited resources to the students. Many of the requisite skills relate to the ability to coordinate the goals and activities of diverse groups, design and conduct public relations programs, provide field-based experiences for students, and effectively coordinate activities among leaders within the business community. Existing programs of teacher preparation, and even programs of leadership development, generally are not oriented toward the development of these skills for educational personnel.

The Board states its intention to encourage the integration of occupational education into the overall curriculum and instructional process by focusing on the issues of program development, curriculum development, and professional development. Professional development is defined in the policy paper as, "involving those who provide occupational education with professional training and appropriate occupational experiences to assure a sound understanding of the changing job market... Integrating into the certification requirements of teachers, counselors and administrators requirements for adequate career guidance knowledge and experience...facilitation of short term instruction by business, industry and labor participants who are distinguished by virtue of experience and expertise in a particular area, in collaboration with occupational education professionals...and stimulating improved career guidance capabilities and involvement of all school personnel in the career guidance function." (pp. 12-13)

The concern that approval requirements for teachers, counselors, and administrators may not currently be suitable for such a broad perspective of occupational education is identified and addressed specifically by the Board in this particular statement. To this end, this research report devotes particular attention to this component of the Policy Paper, in that it will assist in identifying those nationally validated competencies and skills required by personnel, and provide guidelines which may serve as the basis for modifications to assist with the development of models and delivery systems to help school systems provide these services.

This study, therefore, is totally consistent with and supportive of the goals and objectives of the recently published Policy Paper for Occupational Education, and may indeed do much to enhance the attainment of these goals as they relate to providing personnel in the schools with the increased capabilities and skills to deliver programs to students.

CHAPTER 1

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CHAPTER TWO

COMPETENCY-BASED VOCATIONAL TEACHER EDUCATION

RATIONALE

The enthusiasm with which competency-based teacher education (CBTE) has been accepted in recent years is a response to both an overall growing dissatisfaction with the "traditional" teacher preparation processes, and increasing demands being placed on schools and colleges to be more accountable for their products. Such accountability demands a greater specificity of objectives as well as an increased measurability of outcomes. Among the charges leveled at teacher education institutions in general are these cited by Finch and Hamilton (1973):

1. teacher education curricula are not built upon the actual work requirements of teachers;
2. instruction is not tailored to meet the needs of individuals;
3. learning experiences are not provided which relate directly to professional needs; and
4. the educational product is not systematically evaluated.

In contrast to these concerns regarding traditional teacher education models, a statement published by the American Association of Colleges of Teacher Education (Elam, 1971) specifies five elements that distinguish a competency (or performance) based teacher education program. They are:

1. Competencies to be demonstrated by the student are:
   a) derived from explicit conceptions of teacher roles;
   b) stated so as to make possible assessment of a student's behavior in relation to specific competencies; and
   c) made public in advance.

2. Criteria to be employed in assessing competencies are:
   a) based upon, and in harmony with, specified competencies;
   b) explicit in stating expected levels of mastery under specified conditions; and
   c) made public in advance.

3. Assessment of the student's competency:
   a) uses his/her performance as the primary source of evidence;
   b) takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior; and
   c) strives for objectivity.

4. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion.

5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.

In addition, several elements which are considered related, and desirable qualities of a competency-based teacher education program include:

1. instruction which is individualized and personalized;
2. the learning experience of an individual is guided by feedback;
3. the program is systematic;
4. emphasis is on exit rather than entrance requirements;
5. instruction is modularized; and
6. the student is held accountable for performance.

The concept of analyzing the needs and tasks required for successful performance in an occupational role, establishing performance standards for students, and evaluating performances using the specified standards is not new; many aspects of CBTE have been associated with sound educational practice for some time. The "newness" is the emphasis on the use of explicit, validated competencies; more objective student assessment procedures; and systematic delivery systems.

As noted by Curtis R. Finch (1974), teacher educators frequently endorse the need for the development of vocational curricula at the secondary level based upon students' future job requirements. Their own courses of teacher preparation, however, are seldom based upon the teacher's actual job requirements.

Teacher educators insist that more attention be given to individualization of instruction for students, while their own classes continue to be conducted in lock-step fashion. Evaluation based upon performance is frequently mentioned as a goal of secondary and post-secondary education, yet many teacher educators who espouse this need focus on purely academic assessment in their own courses.

While the future of vocational teacher education is basically no different from that of any other aspect of teacher education, there exist areas which are of particular concern to vocational educators, and which relate to the efficiency of the delivery system. Many colleges currently offer vocational teacher education in separate departments, identified by service areas (Agriculture, Business and Office, Distributive, Health Occupations, Home Economics, Technical, Trade and Industrial Education). Research conducted at the Center for Vocational Education at the Ohio State University (Cotrell et al 1971-72), however, indicates that this approach constitutes an unnecessary duplication of effort, since more than 90 percent of professional vocational teacher competencies are common across two or more service areas. The study that led to this validated conclusion is discussed in greater detail in a separate section of this chapter.

Vocational teacher education institutions can anticipate a reduction of their costs and an increase in their efficiency by providing "core" offerings, common across a number of vocational/technical service areas. These core or common offerings would relate, of course, only to pedagogical competencies. Competency-based teacher education then has the potential to improve the efficiency and cost-effectiveness as well as the quality of vocational teacher preparation programs.

The concepts of CBTE can be adapted also to teacher certification or approval requirements. Teacher certification nationally has traditionally been granted upon completion of a degree, or in the case of vocational approval, working a minimum of six years in the technical area and completing approximately 18-24 academic credits. This approach is predicated on the assumption that teaching proficiency in academic fields is highly correlated with the attainment of an academic degree, or six years of work experience in a trade for vocational fields. Competency-based teacher education can help initiate the incorporation of identified competencies into teacher preparation, and the same system can be used to certify teachers, since the relationship between the two is very direct.

HISTORICAL ANTECEDENTS

Antecedants of competency-based education for vocational teachers appeared as early as 1960. Walsh(1960) compiled a list of 107 competencies needed by trade and industrial education teachers obtained from 514 teachers of trade and industrial subjects, 228 state and local supervisors, and 120 trade and industrial teacher educators. These competencies were divided into two groups: 1) those involving knowledge and understanding; and 2) those involving ability.

Orley D. Gunderson's study (1971) assessed those common professional competencies needed by community college instructors of trade and industrial and technical subjects. A survey instrument comprised of nine professional education competencies was utilized to allow instructors to respond to the level of proficiency needed for each item in relation to their jobs. The study demonstrated that the design, administration and factor analysis of such a questionnaire is an effective means of obtaining useful data for the development of vocational education curricula.

At the Center for Vocational and Technical Education, a team working under the direction of Calvin J. Cotrell (1971) conducted a project designed to develop, implement, and field-test curricula for the pre-service or in-service preparation of a number of categories of vocational and technical teachers. A major portion of this study involved identification of the pedagogical competencies needed by teachers of vocational education in seven occupational service areas.

A study by Erpelding (1972) of the educational competency needs of post-secondary occupational education teachers in Kansas used a mail survey with a list of 45 professional education competencies considered useful and necessary in their jobs. The instrument was structured to permit respondents to rate levels of proficiency required, proficiency attained, and type of educational setting in which proficiency for each competency might best be acquired. Findings of this study indicated that the respondents identified a large number of similarities in the levels of proficiency required for these 45 competencies by post-secondary occupational education teachers.

In 1973, Ron H. Ely conducted a study to determine the performance-based professional education needs of secondary level occupational teachers in New York State. An eighteen page instrument was designed, using as its foundation the pedagogical performance elements developed by Cotrell et. al. in the Model Curricula for Vocational and Technical Teacher Education. The major conclusions of the study revealed that:

1. Teachers perceived some professional competencies as being very important and others as being unimportant.
2. There is a considerable amount of overlap in the importance attached to professional education competencies.
3. Teachers in the seven service areas surveyed perceived their performance at similar levels.
4. There is little difference in the perceived in-service needs of vocational education teachers in New York State.
5. The professional competencies included in the research instrument represent a reasonably inclusive list of the professional behavior of vocational teachers.

Moore (1975) used mail survey and interview techniques to determine the professional education competency requirements of three groups of vocational agricultural education majors, four-year college technical agriculture majors, and non-college graduates. A list of 256 professional education competencies most essential to vocational agriculture teachers was compiled, using as a base the 384 competencies developed by Cotrell et. al. (1972) at the Center for Vocational and Technical Education. The list was then grouped into ten competency areas.

Findings of the study identified the following major results:

1. Both groups of four-year college agricultural majors agreed that the competency areas of management, guidance, and professional role and development were more important in functioning as or becoming a successful secondary level vocational agriculture teacher than the other seven competency areas.

2. Non-college graduates perceived the competency areas of guidance, planning, of instruction, coordination, management, execution of instruction, and professional role and development as the areas most important in functioning as or becoming a successful vocational agricultural teacher.

3. Four-year college majors were in need of in-service professional education training in the five areas of coordination, management, professional role and development, planning of instruction, and program planning, development and evaluation.

4. Non-college graduates were in need of in-service professional education training in all ten competency areas.

Currently, many colleges throughout the country are adopting competency-based education in their vocational teacher education programs. In Massachusetts, Westfield State College is conducting an experimental program using instructional modules based upon competencies selected from those identified by Cotrell et. al. at Ohio State University. This program will be discussed in greater detail later in this report.

It is apparent that many of the recent studies and currently operational models have successfully built upon the foundation supplied by the list of professional vocational teacher competencies developed by the Cotrell team at the Center for Vocational and Technical Education (Cruz, in progress 1976). Consequently, this report will utilize the Center's studies as its major reference point and review other studies and implementation strategies as they relate to this landmark research.

ADVANTAGES AND DISADVANTAGES OF CBVTE

Most proponents of the CBTE and CBVTE movements would agree that a teacher education program is competency-based if it contains the following characteristics:

1. Individualized instruction: The student teacher is involved in making instructional choices that he considers relevant to his own interests.
2. Instructional modules: A module is a unit of learning consisting of a set of activities intended to help a student teacher achieve specified objectives, and contains the capability for measuring entry and exit student performance.
3. Time as a variable: Completion of modules and rate of progress through the program are determined by the student achievement of the objectives rather than by the traditional requirement of course completion in a fixed time span.
4. Field-centered instruction: Because of the emphasis on performance in real settings with pupils, there is earlier field-based activities that progressively increase in intensity and extensiveness.
5. Emphasis on exit rather than entrance requirements: While program admission requirements are less rigid, demonstration of competency is required for certification. (Vanderpool, 1974)

It is generally accepted that the design of a viable competency-based vocational teacher education program, should integrate the essential characteristics identified above into a comprehensive system for the delivery of instruction. The Education Professions Development Act (EPDA) Workshop on Competency-Based Vocational Education at Lexington, Kentucky in April, 1976 outlined the characteristics of an idealized program, designed to incorporate all of the intended advantages of competency-based vocational education. A description of such a program for students at the secondary level is as follows:

1. The student's technical preparation is individualized and personalized. Students must demonstrate occupational competence, but do not have to complete a "lock step" prescribed set of learning experiences.
2. Entering students confer with a resource person, (the teacher thus serves as the resource person and not as the sole dispenser of knowledge) and together they plan a program based on the student's personal vocational needs, interests, and goals.

3. All students are expected to demonstrate a central core of occupational competencies. Another set of objectives, while recommended is negotiable and is comprised of optional competencies that provide greater depth in various technical areas.

4. As a student progresses through the CBTE program, his/her objectives may be re-planned, based on personal development and emerging needs emanating from experience in the program.

5. Resource persons are available to assist students in completing modularized learning activities; to suggest additional experiences; to critique student products and performance; and to help solve procedural problems.

6. There are no formal sub-courses in the technical subject matter areas of the vocational program. All instruction is based on individualized learning (e.g. modules or packages). Students have the opportunity as well to design alternative learning experiences in order to acquire necessary competencies.

7. Students are brought together as desirable for interaction activities, small group work, or class discussion of general topics.

8. Skilled practitioners from the occupational service area are used as resource persons (teachers) as needed to help students with special technical problems.

9. Time is not a factor in the student's program of progress; mastery of competency is the sole criterion for success.

10. Students may arrange to negotiate when, and under what conditions they will demonstrate occupational competence.

11. Credits are awarded to students on the basis of the number of modules successfully completed, or competencies achieved. Each module has an assigned value of a fraction of a semester hour or appropriate credit equivalent. A student is generally expected to complete a minimum number of modules each semester, but may progress beyond as individual interests and talents permit.

12. Student letter grades are replaced by a simple "pass/no credit" system. Students who meet the criteria of a module are awarded a grade of "pass" for that module on their official records. Students not meeting the criteria have nothing entered on their offical records. This is full implementation of the concept of mastery learning.

13. Students are granted diplomas or certificates by meeting the school's standards for demonstrated occupational competencies and accumulating the minimum number of credits established as requisite for basic performance in the field.

14. Upon completion of the program, students receive a standard certificate and a special transcript. The transcript, which is furnished to prospective employers, includes a complete record of the occupational competencies demonstrated, and evaluations of the student by the resource person.

A program of this type identified at the secondary level and then appropriately translated for professional competence development in teacher education can help to meet a number of needs now being expressed by those concerned with vocational teacher education. Such a program immediately places teacher education on a more sound empirical base, which may improve curricular relevance. Another opportunity allows for the integration of research findings into functional programs. A third need focuses on the reduction of inefficiency and overlap in vocational teacher education offerings between subject areas. (Finch 1974)

As vocational teacher educators prepare to implement CBVTE programs, certain concerns and problems may arise. Among these factors are the following listed by Burdin (1974):

1. An immediate concern is with the origin of pressures to incorporate CBVTE into existing teacher education programs. These pressures represent a recognition of the importance of education; they constitute also the involvement of critical groups. Under pressure to move rapidly toward CBVTE, educators may be changing form without changing substance since a philosophical acceptance as well as adequate professional development and resources for implementation must precede full-scale program adoption.

2. There is an absence of hard facts which clearly connect specific teaching acts with predictable changes in student behavior. Factors beyond teaching, such as a student's socioeconomic class status may influence learning and complicate efforts to determine casual relationships between teaching acts and specific learnings by students.

3. In selecting competencies to be included in a specific program, questions may arise such as:
   a) Which competencies should be included in this training program?
   b) How are these competencies to be identified?
   c) Will they be made uncontroversial and even inconsequential simply to gain assent?
   d) To what extent is there temptation to skirt emotional and difficult--and yet important--competencies?

4. The following financial problems exist as well.
   a) Developmental costs for the initial training and personnel and time to select competencies, develop instructional materials, create assessment techniques, and establish the management system.
   b) Operational costs for extensive instructional materials, assessment procedures, record keeping, and released time for school personnel supervising clinical experience.

5. Following are some problems related to professional development of personnel:
   a) Time and money are needed to develop, produce, and market instructional modules; and to prepare personnel to use them effectively.
   b) The processes necessary for teacher educators and in-service education personnel must be assessed as well.

6. Assessment problems as follows must also be addressed.
   a) CBTE advocates usually call for assessment of training programs based on what students in grades K-12 can do. Determining their achievment--and therefore that of teachers--has to be based on techniques suitable for CBTE. Current tests and procedures were designed for traditional group learning environments based upon normative assessments. Criteria must be shifted to learner outcomes assessed through multi-media, feedback, and student achievement.
   b) By using normative general competencies, it is also feasible to include special competencies and related assessment for Blacks, Chicanos, Puerto Ricans, American Indians, Appalachian Whites and other unique groups.

A similar contrast regarding social class as it relates to competencies stated that occupation and income of parents, place and type of residence, and ethnic background have implications for some individuals in their vocational development. (Lipsett 1962, Magisos, 1973)

In conversations with many professionals implementing CBVTE programs, the authors of this study have identified a further dilemma. In the name of individualizing instruction and providing field-based teacher education activities, a number of programs have become totally field-based and modularized. Consequently, the students interact solely with their school-based support personnel and university coordinator. There is virtually no contact with other students involved in the teacher education program. A number of these students have expressed dissatisfaction with this aspect of the program and miss the opportunity to share experiences with each other and "learn from each other's mistakes". The reinforcement of learning that other students share common problems and concerns is lacking. A case may well be made that some essential group activities and affective learnings are lost when a program becomes totally modularized and field-based. Certainly further study is warranted to identify the most appropriate balance and match of field-based to campus-based and individualized to group activities.

SOME DISTINCTIONS, DEFINITIONS, AND CLASSIFICATIONS

Competency-Based Teacher Education (CBTE) and Performance-Based Teacher Education (PBTE) are not conflicting or competing concepts although a distinction does exist between them. Edgar A. Kelley (1974) defines PBTE as an approach which uses the demonstrated performance of the teaching behaviors specified in the teacher preparation program as the criterion for evaluation of prospective teachers. CBTE, on the other hand, is based on the assumption that results obtained by a prospective teacher in work with pupils in the classroom is the appropriate evaluation criterion, with the expectation that the teacher will be able to repeatedly obtain the desired results. CBTE then can be viewed as an extension of PBTE, which provides increased accountability.

Because the intentions of both CBTE and PBTE are essentially the same, most educators now consider the terms to be interchangeable, with the designation C/PBTE as still another option. In current usage, CBTE is the dominant term and will be used throughout this report; the other two terms will be considered synonymous with CBTE for purposes of this study.

As educators have moved toward the design of competency-based programs, much attention has been focused on the development of objectives. Benjamin Bloom's and David Krathwohl's taxonomies of educational objectives classify objectives as cognitive (knowing), affective (attitudes, beliefs, values, perceptions, feelings), and psychomotor (doing).

W. Robert Houston and Robert B. Howsam (1972) provide a list from which can be drawn four categories of objectives commonly included in teacher preparation programs:

1. Cognitive objectives focus upon what the student is to know. More specifically, objectives which require student knowledge about teaching or about a subject matter discipline are examples of cognitive objectives. Most teacher education programs have focused, in the past, on cognitive objectives. Often attainment has been measured in global ways, such as grade point averages or scores on standardized tests (e.g. the National Teacher Examination).

2. Affective objectives are concerned with beliefs, attitudes, values, and perceptions which an individual has of himself or of others, as well as the beliefs, attitudes, and perceptions which others have of the individual. All too often, this type of information has been reported informally through such vehicles as a letter which might be written for a teacher's placement file indicating that the teacher had "a good attitude", "was enthusiastic", or "doesn't get along well with others".

3. Performance objectives are concerned with specified behaviors which are to be demonstrated by the student. In a teacher education program, performance objectives define the verbal and nonverbal behaviors to be demonstrated by the teacher. These behaviors, for the most part, have been selected on the basis of assumptions about what a teacher should do to be effective. In the past decade, considerable research has been conducted in an attempt to define probable results of specific teaching behaviors. Video-taped teaching sequences and various coding patterns or systems have been used to identify relationships between observable teacher behaviors and subsequent learner behaviors.

4. Consequence objectives are concerned with specifying the learner results to be obtained by the teacher. The teacher is judged to be effective or ineffective on the basis of whether or not the students being taught are able to achieve the intended learner outcomes. The achievement of cognitive, affective, or performance objectives by the participant in a teacher education program does not guarantee that the pupils taught by the teacher will achieve intended outcomes. CBTE programs focus on the behaviors to be exhibited by the pupils taught by the teacher.

Mounting pressure for accountability in teacher education has led to increased interest in consequence objectives, rather than cognitive, affective, or performance objectives, as described above. Accountability refers to the ability to provide a rationale for a plan of action; to be responsible for the results of those actions; to deliver on promises. A competency-based program, designed to meet demonstrable performance objectives, is intended to provide an accountable delivery system for teacher education.

However, if competency-based teacher education is to be achieved, certain changes in teacher preparation and certification need to be made. Edgar Kelley (1974) identifies the following:

1. Preservice programs will need to be extended to permit the inclusion of teaching internships lasting two years.
2. Certification standards will need to be revised so that distinctions between initial teaching certificates and permanent professional certificates are based on stated performance and consequence criteria. Continuing to base credentials on the accumulation of years of service in teaching and the acquisition of additional academic credit hours should be eliminated.
3. Supervision of teacher performance and measurement of consequence data in school settings will need to be improved so that the retention, dismissal, or promotion of teachers is based upon the teacher's ability to achieve intended consequences.

CBTE is now mandated in many states, and strongly advocated in others. Evidence is accumulating that vocational educators can meet the challenges of CBTE, and that the results of competency-based programs and certification procedures are worth the expenditures of effort and resources.

MODEL CURRICULA FOR VOCATIONAL AND TECHNICAL EDUCATION

The urgency for curricular change in vocational and technical teacher preparation has increased markedly in recent years as shortages of adequately trained and well qualified personnel have become ever more apparent. The demand to develop and offer relevant vocational and technical teacher education curricula based on the current needs of teachers has grown. Lack of in-service education programs and duplication of course offerings from one vocational service area to another within teacher education institutions have also contributed to the need for revisions. And, as ever, the debate regarding the total amount of technical experience combined with the appropriate "mix" of pre- and in-service education continues.

In response to these and other concerns and problems, in 1969 The Center for Vocational Education at the Ohio State University created the project known as "Model Curricula for Vocational and Technical Teacher Education", which will be described in this section.

It was considered necessary to determine those elements of the professional development aspect of teacher education common to several service areas; and those unique to one or a few services in order to plan how instructional resources could best be utilized and duplication of efforts eliminated. Therefore, the study was designed to investigate the means of increasing the efficiency and effectiveness of vocational teacher preparation by determining the common elements while continuing to meet the special needs of each vocational service.

The Center's project, "Model Curricula for Vocational and Technical Teacher Education", was undertaken to develop, implement, and test curricula for the preparation and in-service education of all types of vocational and technical teachers and teacher-coordinators. The project was divided into two parts: Phase I, which determined the pedagogical performance requirements for teachers of conventional service area programs, and Phase II, which identified the pedagogical performance requirements of teacher-coordinators of cooperative programs, including new and emerging occupational areas.

The objectives of Phase I were:

1. to identify the performance requirements common for teachers in a majority of vocational services;
2. to identify the performance requirements unique to one or a few services; and
3. to develop behavioral objectives for model curricula.

The curricula to be prepared were to be projected from a career-oriented, performance-based study of the pedagogical needs of all vocational teachers. Phase I was limited to determining the performance requirements of teachers in agricultural, business and office, distributive, health occupations, home economics, technical, and trade and industrial education.

Criteria for identifying a performance requirement (or performance element) were defined, and a system of analysis devised and tested. Through application of occupational analysis techniques, 237 performance elements were identified, eleven of which were subsequently eliminated. Most were found to relate to the affective and cognitive domains. A performance element was defined as the smallest meaningful entity of activity into which the pedagogical duties of a teacher may be divided.

In translating the performance elements into curricular objectives, it was decided that performance-oriented general objectives, rather than the more specific behavioral objectives, would be written.

A twenty-one member task force representing of each of the 7 services (a teacher educator, state supervisor, and a master teacher from each service) was then asked to evaluate the importance of each of the 237 performance elements for experienced teachers, using a 3 point scale, with 3 as "very important", 2 as "important", and 1 as "not important". The task force was then asked to judge whether or not an element previously rated "very important" was considered essential at a reasonable level of competency for beginning teachers. This was done on a 0 - 1 dichotomous scale.

The ratings were analyzed to determine which performance elements were important to all services to be listed as common elements; elements important to two to four services were labeled mixed; and those important to one or a few services, unique elements. Some elements were rated as not important.

The task force ratings indicated:

1. little difference existed in pedagogical requirements of secondary and post-secondary teachers;
2. more mixed elements were found to be important to beginning teachers than unique or common elements;

3. no meaningful curricular projections for specialized courses were found in the important unique elements for beginning teachers;

4. 93% of elements were found to be common for experienced teachers;

5. the mixed and unique elements for experienced teachers did not provide a projection for specialized curricula for one to four services;

6. the findings of performance requirements project the feasibility of core curricula for collegiate undergraduate and graduate in-service education for the preparation of teachers for relatively standard vocational-technical programs; and

7. the 50-60% of performance requirements classified as mixed or unique support the need for some specialized curricular offerings. The mixed elements occurred in no meaningful combinations or clusters. Consequently, no meaningful curricular projections for teacher education courses serving two to four services may be made.

A critical incident survey was conducted by mail and analyzed to determine its correlation to the performance elements previously developed in the occupational analysis procedure. This comparison was completed to give validity to the performance elements not found in the initial occupational analysis. A critical incident is defined as an act by a teacher that seemed markedly effective or ineffective, whether in a shop, laboratory, or related class; in high school, post-high school, or an adult program. The incidents were classified into the following divisions:

1. Instruction
2. Guidance
3. Management
4. Public and human relations
5. General school activities
6. Professional role
7. Student vocational organization
8. Coordination.

The incidents were also grouped regarding their relationship to beginning teachers (up to 3 years experience), and experienced teachers (4 or more years experience).

Recommendations produced by the project staff included the following:

1. Introspection and interview techniques of occupational analysis should be applied in the determination of performance requirements of positions for which personnel are to be developed, evaluated, or certified, as well as to periodically revise the performance requirements of positions to support changes in teacher education curricula.

2. Consideration should be given to developing core courses in teacher education curricula. However, factors other than performance requirements, such as teaching strategies, time constraints, etc., should be considered in decisions to establish core or specialized teacher education courses.

The pedagogical requirements for teachers then became the basis for the creation of general objectives. These were grouped into the following ten categories:

1. General objectives for Planning of Instruction
2. General objectives for Execution of Instruction
3. General objectives for Evaluation of Instruction
4. General objectives for Guidance
5. General objectives for Management
6. General objectives for Public and Human Relations
7. General objectives for General School Activities
8. General objectives for Professional Role
9. General objectives for Student Vocational Organization
10. General objectives for Coordination

Criteria for evaluating the achievement of each competency is included in the matrix of objectives.

In Phase II, the performance requirements of teacher-coordinators of vocational and technical programs were identified. The programs included were: off-farm agricultural, distributive, wage-earning home economics, office occupations, special needs, and trade and industrial education. Specific objectives of the study were:

1. to identify the performance elements required for teacher-coordinators of six vocational programs studied; and

2. to determine which elements were common to a majority of the programs and which were unique to one or a few.

As in Phase I, occupational analysis through introspection and interview techniques was used to obtain the pedagogical performance requirements, which were then rated by a 300-member task force to determine the degree of importance of each of the requirements of elements. This resulted in the identification of 385 performance elements, 98.1 percent of which were rated as common requirements of the six programs. Less than one percent were found to be unique. It was concluded that performance requirements for teacher-coordinators of all six programs were very similar, leading to the recommendation that core offerings should be considered in developing curricula for the preparation of teacher-coordinators.

A follow-up conference with a 10 percent random sample of the original task force resulted in confirmation and clarification of the original ratings.

Pedagogical activity was divided into 10 categories similar to those selected previously for teachers. The 385 performance elements were divided into 82 clusters of related elements through the interpretation of a computer print-out produced by factor analysis technique. This served to expedite a review of the performance elements and ratings.

No support was found in the study for offering specialized professional education curricula for each of the cooperative vocational education programs represented in the study. However, a performance base was established for the development of teacher education curricula, certification requirements, and evaluation systems for teacher-educators and teacher-coordinators in cooperative vocational education programs.

In the next step, data from Phases I and II of the project were merged to establish a combined set of 390 performance elements which form the current foundation for the program in its present form. These performance elements have been grouped into 50 clusters and assigned to 10 categories; they were then utilized as guidelines for the development of performance-oriented general objectives for performance-based core curricula to prepare in-school vocational teachers and cooperative secondary program teacher-coordinators for all vocational services.

Based upon the results of Phases I and II of the project, the investigators concluded that:

1. the performance requirements as guidelines for a career-based and relevant teacher education programs are the same for secondary and post-secondary teachers of in-school occupational programs in all services; and
2. the requirements for teacher-coordinators of cooperative programs for all services are the same.

The results of Phases I and II were merged and reduced by logical interpretation and comparative analysis. Based on the data collected, the performance elements of teachers were considered as 1) core basic, and 2) core option guidelines for curricula for all teachers of secondary and post-secondary in-school vocational programs and teacher-coordinators of secondary cooperative programs.

Performance-oriented general objectives were developed to clarify the intent of each element. These are similar to behavioral objectives but are written on the general guideline level. Each performance-oriented general objective is based on one or more performance elements, and consists of the following:

1. a statement of the desired activity of the teacher,
2. the general conditions under which the activity will be carried out,
3. suggested general criteria for appraising achievement of the objective

The general conditions (teaching environment) for instruction would be one of the following configurations:

1. pre-service or in-service programs;
2. any teacher education institution or program;
3. a methods class, micro-teaching clinic, student teaching, internship or other specific teacher education activity; and
4. various levels of performance.

A Teacher Education Seminar was provided, with presentations on the main topics identified in the project. The reactions of the seminar participants were synthesized into:

1. a list of suggested core offerings; and
2. a list of suggested core teaching strategies.

The consolidation of data from Phases I and II resulted in the final listing of 384 elements important to the successful performance of teachers and teacher-coordinators of the programs studied. These elements were then used as the basis for writing the performance-oriented general objectives contained in the report.

Each general objective consists of three parts:

1. the statement of required activity derived from the performance element, each of which is preceded by the phrase "The teacher will...";

2. the conditions under which the activity is to be carried out (the same set of guidelines is used for all general objectives); and

3. criteria for evaluating the teacher's performance of the activity.

The criteria provided were included to amplify the intent of the elements, and are not all-inclusive. Users are urged to amend or write additional criteria as appropriate.

The general objectives should serve as guides to curriculum developers, and help keep their efforts performance-based. Frequent reference to the general objectives will reduce the tendency for curricular units being developed to revert and emerge as traditional "subject-centered" material.

The list of categories and performance elements, along with examples of the use of the category framework and the development of performance objectives from general objective criteria, are contained in Appendix A.

SOME OPERATIONAL MODELS OF COMPETENCY - BASED VOCATIONAL TEACHER EDUCATION

Passage of the Vocational Education Act in 1963 and the Vocational Education Amendments in 1968 provided impetus for the growth and expansion of both secondary and post-secondary occupational programs. Expanded programs created a large demand for additional teachers. The new demands of these manpower needs placed on teacher education institutions required that a new, hard look be given the existing delivery systems for vocational teachers. It was acknowledged that preservice and inservice vocational teacher education programs must provide for both baccalaureate and certification requirements, but it was also considered desirable for graduates to be of a higher quality than those previously prepared. New alternatives to the traditional approach were needed.

The concept of competency - based vocational teacher education is currently being implemented in many institutions throughout the country in response to these pressures for change. In this section a number of such programs will be described.

University Of Michigan Model

The University of Michigan has created a program of teacher training for occupational education which has a competency orientation. This program does not separate teacher trainees by service areas for the professional courses; common professional teaching competencies are emphasized. Individualized learning contracts and directed teaching experiences applicable to the specific service areas are provided along with technical contract courses for each of the occupational subjects.

When this program was initiated in 1971, students with occupational work experience were given priority in enrollment. Students lacking such experience were enrolled in "Structured Work Experience" courses to enable them to receive on-the-job learning experiences, and all students were encouraged to maintain their occupational skills through part-time work in their occupational areas throughout the program.

The curriculum for the program at the University of Michigan, is based on 269 competencies which were chosen from the 384 competencies identified by Cotrell et, al, in the "Model Curricula for Vocational and Technical Teacher Education" project at Ohio State University in 1971.

Individual competence is gained through a multiplicity of learning experiences including teaching the socio-economically disadvantaged, development of student-centered instructional techniques, and self-evaluation through directed teaching.

The starting point within the curriculum schedule is dependent upon the entry skills possessed by each student entering the program. Students may earn baccalameate degrees, and graduates are qualified for general and vocational teacher certification. The curriculum schedule, described as functional course titles is shown in Figure 1.

The Occupational Teacher Education Program at the University of Michigan was based on the following assumptions:

1. Teaching competencies can be identified and validated.
2. Teaching for occupations requires specific competencies which are common for all occupational teachers.
3. Students bring to every educational experience a variety of backgrounds and past experiences, and therefore have individual needs and patterns of learning.
4. Students have different abilities and levels of motivation, and thus progress through the program at different rates.
5. The community colleges and certain private vocational-technical schools are doing an outstanding job of developing technical occupational competencies. Graduates of these programs can be prepared to teach.
6. Inservice teacher education can be an efficient means of providing qualified occupational teachers.

These assumptions were combined to form a unique foundation for the program which was characterized by four main concepts:

1) competency - based teacher education; 2) comprehensive and across-the-board programs of study; 3) emphasis on teaching the disadvantaged; and 4) capstone. (Vogler and Patton, 1974)

Figure I
University of Michigan
Occupational Teacher Education Program

Semester One Courses

- Methods[1]
- Micro-Teaching and A-V
- Educational Psychology[1]
- Educational Sociology[1]
- On-Site Urban Observation
- Field-Based Practicum
- Structured Work Experience

Semester Two Courses

- General Education
- Minor Requirements
- Foundations of Occupational Education[2]
- Electives

SUMMER

Structured Work Experience

Semester Three Courses

- General Education
- Minor Requirements
- Electives

Semester Four Courses

- Directed Teaching[1]

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[1] Required for teacher certification.

[2] Required by Occupational Education Program

[3] Courses and semesters may be interchanged with the limitation that directed teaching must be done with senior standing.

The competencies selected were grouped, assigned to courses, and formed the basis for all content taught. Credits were earned through the successful completion of performance objectives. Individualized instructional modules, seminars, structured work experience, workshops, community-based observations, field-based classroom practicums, micro-teaching and individualized conferences supplemented classroom instruction.

All categories of service areas were blended in The University of Michigan's Occupational Education Program to provide a comprehensive delivery system consistent with non-categorical legislation and funding, with emphasis on teaching/learning rather that occupational content. This approach also gives students broader exposure to occupational education and provides the means of preparing teachers in highly specialized, rare, or emerging occupations.

Vocational education for disadvantaged students was addressed through the addition of the following components:

1. The student participated in an on-site workshop in Detroit, Michigan. The workshop provided sheltered exposure to community and family environments. Cooperation with sixteen social agencies facilitated the workshop. An intensive interaction seminar followed the workshop.

2. The student observed and aided one day per week in a Detroit public school vocational class under the supervision of a certified teacher. The experiences were coordinated via a weekly seminar with university staff.

3. The educational psychology and educational sociology courses were taught in the urban setting, with other urban education students, and by instructors with urban education backgrounds. The content and sequence of learning activities were coordinated with the rest of the professional education experience. (Vogler & Patton, 1974)

   An occupationally competent student is "capstoned" with two years of university training to complete a bachelaureate degree. The concept is based upon the assumptions that:

   a. the community college or post-secondary occupational training center can provide better facilities, staff and equipment for occupational training than the university,

b. credit earned for training in an occupation should be recognized for transfer to the occupational teacher training program at the university and

c. students should be permitted to change career goals from the occupation trained for to teaching the occupation.

When these assumptions are accepted and implemented, new flexibility can be gained in teacher training programs. Among the benefits to be realized are these:

1. The university need not invest resources to duplicate facilities, equipment, and staff for the preparation of occupationally competent prospective teachers. Thus, the primary function of the university was professional teacher training.

2. Students could now accumulate sufficient credits to graduate within two additional years of college work. Thus the time line for development of a teacher, from recruitment to graduation, was reduced to two or less years.

3. The base for recruitment was expanded to include the community college and other post-secondary occupational training institutions. Thus, the recruitment of students directly from industry was not necessary.

4. The traditional problem of dual commitment to both an occupation and a teaching profession could be addressed. Formerly student and teacher trainers could not separate the two objectives. However, the capstone concept provided a convenient separation point. Thus, a student would not be recruited to the program unless already occupationally competent and expressing an open desire to become a teacher. (Volger and Patton, 1974)

Interim evaluation of the Occupational Teacher Teacher Education Program at the University of Michigan indicates success. Courses have received high ratings in relation to other courses in the School of Education, attrition is less than 5%, and earned grade points are in excess of 3.00 for over 75% of the students. (Volger, 1973)

Temple University Model

At Temple University in Philadelphia, Pennsylvania, Program VITAL was designed as the outgrowth of an agreement with The Center for Vocational and Technical Education at Ohio State University in which Temple University was designated as a site for the testing of instructional modules. VITAL stands for

Vocational Intern Teaching which is Applied Learning.

Program VITAL was initiated as a result of the conclusions that the traditional in-service program of vocational teacher preparation at Temple University was not greatly influencing the teaching behavior of its in-service teachers. It was believed that the reason for this was that the application stage of the learning process was being largely neglected due to the prevalence of lecture and discussion modes of instruction. The goals of the project were:

1. to individualize the vocational teacher education program;
2. to implement a competency based model; and
3. to require each in-service teacher to prove his/her teaching competency in an actual teaching environment. (Adamsky, 1973)

Modules provided by The Center permitted the program to be individualized since they could be assigned to each in-service teacher according to her/his specific needs. Modules move the user through stages ranging from awareness to application with specific criteria for evaluating competence, so the program could be competency based. The competencies that accumulate through these learning experiences can then be proven in actual teaching environments.

Among the concepts integrated into Program VITAL are: field-based teacher education, competency-based teacher education, criterion referenced evaluation, individualized learning, self-pacing, self-evaluation and differentiated staffing. Each concept works in combination with the others.

Differentiated staffing is considered a critical factor. This staff consists of the following:

The Intern - Since he/she is responsible for his/her own learning and performs self-evaluation the intern is considered a member of the staff.

The Resident Resource Person - He/she is a master teacher in the school in which his/her interns are teaching. He/she helps the interns analyze their needs and select modules. He/she guides interns in the selection of learning experiences and provide feedback on performance.

The Field Resource Person - He/she is an employee of the university and functions in a manner similar to the resident resource person. In addition, the field resource person collects evidence of the competencies developed by the interns and submits it to the senior teacher educator.

The Senior Teacher Educator - He/she maintains cooperative relationships between the university and local schools where the interns are placed. He/she reviews the competency developments of the interns with the resource persons, and facilitates the development of their supervisory skills.

The Council of Educators - Representatives of local administration, teacher education and competent teachers comprise the council of educators, which reviews evidence presented by the senior teacher educator regarding an intern, and recommends that the intern either be provisionally accepted into the profession, or develop additional competencies.

Program VITAL is now in full operation, serving Eastern Pennsylvania. The success of the project was best expressed by a master teacher from the Delaware County Vocational Schools who said, "The teachers out here view the traditional program as something an intern teacher must complete to get a teaching certificate. In contrast, they feel that the intern teachers receiving their professional education VITAL style are developing the skills needed to reach vocational students" (Adamsky, 1973)

Wayne State University

Wayne State University in Detroit, Michigan established Vocational and Applied Arts Education (VAE) in 1971, and comprised of three former departments: Business and Distributive Education, Family Life Education, and Industrial Education. The purpose of this new department was to "develop a systems approach for the preparation of teachers, supervisors, and administrators in Vocational and Applied

Arts Education," (Cook & Richey-no date)

The theoretical assumptions upon which the VAE program is based are these:

1. The classroom teacher makes a difference in the teaching-learning process.
2. Teacher education can and must make a difference in teaching performance.
3. The teaching-learning process can be divided into a series of identifiable parts.
4. Decisions concerning revision of any part of a teacher education program should be data based.
5. A partnership should be developed between teacher educators and public school personnel.
6. Each institution should develop its own program. Ultimately, a program must be internalized by a staff it it is to be viable.

It was concluded that a typical teacher education program consists of these three types of competencies:

1. General education competencies - knowledge skills and judgements contained in the first two years of the liberal arts section of an undergraduate degree.
2. Teaching content competencies - knowledges, skills and judgements contained in the program requirements of the teaching major and minor.
3. Professional education competencies - knowledge, skills and judgements contained in the required education experiences.

The third group of competencies were the focus of the development of the VAE program since these were the direct responsibility of the College of Education. There are four major phases in the program which must be approached sequentially by the student. Each is field-oriented, with field contact increasing at each step. They are:

Phase I Introduction to Vocational and Career Education - a four hour course which assists students in developing an understanding of the job of a vocational teacher and in deciding if this is the career choice they wish to make.

Phase II Foundations of Education - an eight-hour course including educational psychology, school and society, and analysis of teaching.

Phase III Methods of Teaching - six classes, consisting of eight hours for each of three curriculum areas.

Phase IV Intern Teaching Block - this is a 24 quarter block of time Students are placed in classrooms in their areas of specialization for which they receive 16 quarter hours. They are in a school setting for an entire semester and follow the same program as their cooperating teacher. Students return to the university one evening a week for a seminar which is problem oriented. Theory and application of the philosophy of education are integrated into the seminar.

The professional education sequence encompassing the four phases results in 44 quarter hours of credit, all taught by VAE faculty. These phases focus on the common attainment of competencies which comprise the faculty's concept of a model entry-level vocational teacher. This model is described by 44 competencies and approxomately 200 supporting performance objectives.

The VAE competencies were identified by using the Cotrell research as a starting point and taking the following steps to convert this list to their own:

1. Conduct a literature review to locate possible competencies.
2. Analyse base list (the first Cotrell list of 255 competencies contained in Model Curricula for Vocational and Technical Teacher Education: Report No. II - General Objectives - Set 1.)
3. Categorize the list by pre-service, in-service, and specialization.
4. Add faculty-generated competencies.
5. Edit proposed list.
6. Rate competencies.
7. Delete low-priority competencies.

Each of the 44 competencies selected was analyzed to identify its component parts, which then became the specific performance objectives by which the competencies are demonstrated.

The performance objectives were written as terminal objectives rather than enabling objectives. These became the common basis of each course offering, regardless of the instructor, when the course is taught, or the delivery system. Each competency has two or more supporting performance objectives to permit students to demonstrate a competency.

Exit tests are administered twice for each course, once at the beginning (so that a student may be exempt from taking the course if he/she already has mastered the skill), and once at the end of instruction (equivalent to the traditional final exam). A test of prerequisite skills is also administered, so that prior to the instructional sequence, a student may demonstrate that he/she possesses the skills upon which the instruction is based.

Delivery systems have not been standardized, and the entire VAE program is not modularized. Some professors use self-instructional learning modules they have developed themselves, while others combine the individualized approach with some large group class meetings.

Basic elements of the VAE Instructional System are the course and program structure charts. These charts are needed if educators are to view competency-based education within a total programmatic context rather than in a fractionalized scheme divided by modules, performance objectives or isolated learning experiences. The charts represent a visualization of the competencies and performance objectives.

An accountability model has also been designed as an integral part of the VAE system. It is divided into three categories: program accountability, process accountability, and professional accountability. Each category defines the accountability of three points of view: the instructor, the student, and the administration, and reflects a concept of accountability based on two major elements; responsibility for achieving instructional objectives which have been stated in advance, and the understanding that each member of the organization must answer to someone in terms of meeting the stated goals according to specified criteria.

In this way, the VAE accountability model is aimed at the inclusion of both the product and processes of an educational program.

Alabama Model

In Alabama, a State-of-the-Art study was conducted under the direction of Howard M. Fortney and the results, entitled Performance-Based Instruction: Curriculum Development in Vocational Education, published in June, 1975. This project established the need for vocational personnel development through performance based instruction, and provided an informational base. The research included reviews of curriculum materials, criterion referenced instruction, conventional teaching skills, microteaching for preservice teacher training and for teacher renewal in inservice teacher training programs.

After reviewing the State-of-the-Art publication, a task force of teacher educators, state staff, and local vocational directors conducted an educational personnel development needs assessment survey involving 169 local vocational administrators, presidents and deans of instruction of technical colleges. The highest priorities for personnel development were found to be:

1. Development of skill in designing and implementing a vocational curriculum based on community needs, needs of business and industry, occupational demand and task analysis with incumbent workers. Such a curriculum would be competency-based and would utilize systems approaches.
2. Instructional supervision for improving teachers' instructional skills and stimulating teachers to improve themselves and the curricula.
3. Evaluation of the curriculum and students' accomplishments.
4. Systems analysis, writing objectives, management by objectives.
5. Skill in establishing communication with faculty, students, parents, families and communities.

6. Individualizing instruction to meet the needs of the disadvantaged and the handicapped.
7. Developing and implementing systems for improving counseling; being able to guide students according to their interests and abilities. (Faulkner and Teague, 1976).

Approximately 100 vocational education counselors were also surveyed, and their priorities for personnel development were:

1. Development of skills in designing and implementing curriculum revisions that are based on occupational analysis and incorporate personal development, adjustment, and interpersonal relations. Curriculum revisions should include development of behavioral objectives and individualized instruction.
2. Establishing communication skills with teachers, administrators, students, and parents, especially parents of exceptional children.
3. Conducting workshops and in-service programs in new trends, techniques, and organization for teaching.
4. Planning and implementing a total student counseling and evaluation program. (Faulkner and Teague, 1976).

After completion of the State-of-the-Art study and the needs assessment survey, vocational educators and state vocational staff representatives met to establish a system for the development and implementation of performance-based instruction in all service areas and at all levels of vocational education programs in the State of Alabama, including both pre-service and in-service education.

The resultant system can be viewed as circular in nature. Teacher competencies relate directly to pupil performance and achievement, and are interrelated. Development in any of the elements of the system leads to competencies in other elements, so that as participants develop various competencies they can define development needs in other parts of the system. Alabama is a member of the Vocational-Technical Education Consortium of States (V-TECS), which has conducted a number of research projects to develop catalogs of performance objectives for vocational subjects at the secondary levels. This research base serves as a framework for the development of planned alternative learning activities (PALA's), which can be used to assist pupils to achieve the performance objectives. Special in-service training is required for teachers utilizing PALA's.

Relating the pupil to the curriculum has three main sub-systems: Cognitive Style Mapping, in which information about individual pupils is analyzed by a computer to produce a "map" of 84 traits that describe how the pupil thinks and learns; the Model for Vocational Evaluation of the Disadvantaged, which combines the psychological testing, work sample, situational, and work sample approaches to assist students in assessing their vocational and academic needs, and the Alabama Occupational Information System, which assists in the processes of career exploration and decision-making by providing extensive occupational information via computer terminals located in the user facility, which may be a school, an employment service office, a prison pre-release center or a rehabilitation center.

A process named Analysis of Teaching-Learning Activities Systems (ATLAS) was designed by Dr. Madeline Hunter of the UCLA Laboratory School using competencies obtained through factor analysis of studies designed to distinguish characteristics of effective teaching from ineffective teaching. This process involves intensive and extensive in-service, but provides also a framework for the development of competency-based teacher education for both pre-service and in-service training in vocational education programs.

The Alabama State Department of Education, responding to a State Board Resolution of 1972, requested that all teacher education programs move toward competency-based certification as quickly as possible. The competencies and processes of ATLAS can furnish both a product and a process for competency-based teacher education because it is appropraate for all teachers.

A system of management by objectives has also resulted from the research in performance based instruction in the State of Alabama. This system provides a means for setting goals, determining priorities, assigning responsibilities, and measuring results. Goal setting, objective identification, and individual job planning increase the effectiveness of personnel at all levels in the management of vocational education.

An important element in the performance based system is the utilization of the vocational teacher education modules developed by The Center for Vocational Education at Ohio State University. Workshops for teacher educators in the use of these modules is planned.

The delivery system designed by the task force group provides EPDA Staff coordination in the in-service education of vocational personnel in leadership roles, namely, teacher educators and state vocational staff. After the leadership had been trained in the system, the EPDA staff would coordinate this leadership in the development of competencies to criterion levels in elements of the system. The trained leadership would then train vocational administrators and cadres of teachers to competency levels in the system. These cadres of teachers would assist in training other vocational teachers while the teacher educators and state staff would assist the cadres of teachers in conducting training sessions. The EPDA staff assists in coordinating the efforts by assisting teacher educators and state vocational staff in developing competencies for the elements of the system, conducting needs assessment for retraining and recycling of all participants in personnel development, and continually monitoring and evaluating the effectiveness of the personnel development program. (Faulkner and Teague, 1976).

Westfield State College Model

In Massachusetts, a competency-based vocational teacher education program has been instituted at Westfield State College. It is an alternative method of providing professional experiences leading to certification in teaching, and is primarily a part-time evening and summer program.

The CBVTE program at Westfield State College was designed to provide pre-service learning experiences to prepare teachers of vocational and technical subjects in secondary and post-secondary schools. Recruitment of participants focused strongly on attracting members of minority groups into the ranks of vocational educators. The program is based on the 384 competencies and 123 learning modules developed by Cotrell et. al. at The Center for Vocational and Technical Education, Ohio State University. Fifty-six of these competencies were chosen by the staff of Westfield State College as those needed by a beginning vocational or technical teacher, and are used as the basis for the pre-service "Foundations of Vocational Education" component.

Basic concepts incorporated into this program include field-based teacher education, criterion referenced evaluation, individualized learning, self-pacing, self-evaluation, and differentiated staffing. The staff consists of the intern, department head, project director, instructor, vocational instructor, and counselor.

Instruction is provided by teams of teachers consisting of (1) a person familiar with and skilled in teaching in vocational schools, (2) a person who can relate on an interpersonal level with the participants and (3) a counselor or advisor. The counselor/advisor will also serve as job developer and placement director for her/his group. Each instructional team will be responsible for the instruction, evaluation, counseling, and placement of up to ten students.

Qualifications for the team members are as follows:

1. Vocational school instructor - person skilled in a particular trade or occupation, and who is philosophically adaptable to CBTE.
2. Instructor from a minority group who is capable of good interpersonal relations with the participants and who is also philosophically adaptable to CBTE.
3. Counselor (preferably from a minority group) who is capable of counseling and job development.

Applicants who have proficiency in their trade and six years of experience in this field are enrolled in the program for two semesters and one summer. Each intern is directed toward courses leading to certification is her/his area.

The Project Director meets with the interns, establishes background, and determines the competency status of the interns through consultation with the instructors and counselor. Competency progress records are maintained by the instructors, the intern, and the Project Director. The Project Director also conducts seminars with the interns, distributes materials, and coordinates the efforts of the intern, the instructors and the counselor.

The intern registers for 6 professional credits at the college each semester and during the summer. Upon completion of the 56 modules, she/he will have achieved the professional requirements for approval as a vocational/technical teacher in the Commonwealth of Massachusetts.

CHAPTER TWO

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CHAPTER THREE

SYNTHESIZED LISTINGS OF COMPETENCIES AT VARIOUS LEVELS

INTRODUCTION

The purpose of this phase of the research was to use the extensive base of prior competency studies to develop a composite list of competencies, organized by functional groupings. These lists (Appendixes B through E) represent the current status of the research in determining competencies for vocational and career educators. As such, they may form a basis both for competency-based program development, and further validation. A separate list of competencies has been developed for each of the levels of vocational education. In addition, separate lists for various levels of career education are provided.

REVIEW OF THE LITERATURE

The first step of the study was to identify the current state of the art of competency-based teacher education at the various levels. Sources used to locate relevant literature and information included the following:

A. An ERIC search, including ARM and AIM.

B. A review of professional publications, documents, and journals in which competency-based teacher education for vocational education was discussed.

C. The EPDA Eastern Conference held in Kentucky in April, 1976. The primary focus of this conference addressed competency-based vocational education at the secondary and teacher education levels.

D. Approximately forty letters to individuals known to be conducting related studies. These individuals were identified through the literature and through the Kentucky conference.

E. Data from the Massachusetts Office of Professional Development and teacher education institutions in Massachusetts.

F. Requests to the Center for Vocational Education at The Ohio State University for information and reports of their work in competency-based vocational teacher education.

CRITERIA FOR SELECTION

The criteria used for including a study, competency or competency list in this research were:

A. the competencies were directed toward vocational, occupational, or career educational personnel.

B. the competencies were behaviorally-oriented or performance-based.

C. the competencies cited professional (pedagogical) tasks.

SCREENING THE COMPETENCIES

Once these studies, competencies and competency-lists were identified and selected, it was necessary to analyze the similarities and differences among them. To accomplish this purpose, competencies were first assigned to either of two categories: vocational/occupational education, or new and related areas (including career education). If assigned to vocational education, the competencies were further classified by level of educational personnel: teacher, middle managers, or administrators. Teachers were defined as individuals whose primary purpose was to provide instruction and supervise the instructional process with learners. Middle managers included first level supervisors, staff personnel, and specialists. Representative job titles included department chairperson, supervisor, curriculum supervisor, coordinator, etc. Administrators were classified as individuals generally responsible for the total vocational program. Representative job titles included superintendent, superintendent-director, vocational education director, assistant director, or principal. Varying titles were more a function of differing environmental and organizational structures than representative of a wide disparity in functions and responsibilities.

Functional groupings within each level of competencies were identified, based on existing groupings in the separate studies. Where competencies clearly related to a separate set of skills, they were assigned to a group with a descriptive title. When competencies were seen to overlap existing groupings, certain groupings were merged and a single category formed (e.g. finances and facilities were merged as operational mangement). Final categories or subgroupings for each personnel level are descriptive of the set of functions required for that level. Table 1 lists the levels of competencies and the functional groupings for vocational education. Table 2 cites similar data for the career education lists.

All relevant studies were assigned to the appropriate level. Every competence in each study was then reviewed and assigned to its appropriate level. In this manner, competencies in each category could be collapsed across all studies to assess similarities and distinctions. Tables 3A, 3B, 3C, 4, and 5 on the following pages indicate which competencies (by number) from each study were assigned to each functional category. This tabular display allows the reader to cross-reference every study used in this project and refer back to the original data from which the synthesized lists were derived.

If the competencies in the original studies were already grouped, the existing groupings were used and the competencies placed into similar functional categories. Each competence was reviewed, however, and in some cases individual items were "culled" and moved to more appropriate categories. If the original studies were not grouped, the total list was disaggregated and the competencies assigned to categories based on their function and/or similarities to other competencies already placed in those categories.

TABLE 1

FUNCTIONAL GROUPINGS OF COMPETENCIES FOR VOCATIONAL EDUCATION

FUNCTIONAL GROUPINGS	LEVEL OF PERSONNEL		
	INITIAL TEACHER PREPARATION	MIDDLE MANAGEMENT	ADMINISTRATION
Program Planning, Development & Evaluation	X	X	
Planning of Instruction	X		
Execution of Instruction	X		
Evaluation of Instruction	X		
(Operational) Management	X	X	X
(Student Personnel) Guidance	X	X	X
School - Community Relations	X	X	X
Student Vocational Organizations	X		
Coordination	X		
Professional Role & Development	X	X	X
Staff Personnel		X	X
Program Administration			X
Finances & Facilities			X
Interpretation of Legislation			X

TABLE 2

FUNCTIONAL GROUPINGS OF COMPETENCIES FOR CAREER EDUCATION

FUNCTIONAL GROUPINGS	TYPE OF PERSONNEL					
	Elementary Teachers	Middle School Teachers	Senior H.S. Academic Teachers	Guidance Counselors	Career Educ. Coordinators	Career Educ. Directors
Curriculum Development	X	X	X	X	X	X
Career Development - Maturity	X	X	X	X	X	X
Community Related Activities	X	X	X	X	X	X
Staff Development	X	X	X	X	X	X
Occ. Information and Activities	X	X	X	X	X	X
Philosophy	X	X	X	X	X	X

After these initial assignments, every competency was reviewed again and reassigned if the functional nature was more appropriate to another area.

DEVELOPING SYNTHESIZED COMPETENCY LISTS

After screening, it became apparent that most of the original lists contained many similar competence statements, with some unique elements. Although the levels of specificity varied, and the semantics and conceptual approaches differed, the essential content for each of the groupings was quite similar. Each functional group of competencies for each personnel level was then analyzed across all studies, and one synthesized list representing a consensus validation of the research was compiled. Competencies within each grouping have been sequenced according to importance, function, and developmental order.

This ordering process allows the reader to more clearly review programmatic needs than would be provided through a randomly listed statement of competencies. The purpose of this synthesized list is not to provide a new validated group of competencies, but rather is an attempt to provide a single document that expresses the current state of the art of competency studies for vocational and career education. The fact that these studies evidence such similarities and overlap in the identification of competencies serves as further content validation regarding the appropriateness, adequacy, scope, and sequence of the various lists.

In these synthesized lists, competencies have been stated in broad terms, and frequently several competencies or groups of competencies in specific studies have been combined for brevity. Individuals using these lists are urged to cross-reference data from the specific studies from which the synthesis was developed.

TABLE 3A

INDEX OF COMPETENCIES FOR TEACHERS AND TEACHER-COORDINATORS CROSS-REFERENCED BY CLUSTER AND STUDY

CLUSTER	COTRELL	OHIO STATE	AMERICAN HOME EC.	BYRD	COURTNEY AND HALFIN	MOORE AND BENDER	CRAWFORD	HUFFSTUTLER AND McCALLON
PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION	1-51	1-11	28-38		1-5;9;13	1-17	6-38	65-80
INSTRUCTION PLANNING	52-78	12-17			21,22,24	18-29		1-22
INSTRUCTION EXECUTION	79-138	18-46	13-17, 40-45		8,15-17,31	30-47		23-48
INSTRUCTION EVALUATION	139-164	47-52			26,27	48-57		49-64,81
MANAGEMENT	165-201	53-61			6,11,12,29, 30	58-71		82-101
GUIDANCE	202-235	62-66				78-82		102-118
SCHOOL-COMMUNITY RELATIONS	236-269	67-76			10	83-92		119-126
STUDENT VOCATIONAL ORGANIZATION	270-298	77-82				93-101		
COORDINATION	331-384	91-100			22,25	110-131		
PROFESSIONAL ROLE AND DEVELOPMENT	299-330	83-90	1,2,18-23 46-52	1-26	7,14,18-20, 28	102-109	1-5	127-144

TABLE 3B

INDEX OF COMPETENCIES FOR TEACHERS AND TEACHER-COORDINATORS CROSS-REFERENCED BY CLUSTER AND STUDY

CLUSTER	CANFIELD	BENSEN	HARRIS	VOGLER AND PATTON	RICHEY	SPAZIANI AND COURTNEY	PERKINS
PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION	7-14	4-11,53-56	41,42,56-60, 63-66	7,80,81,131, 133-136	1,2	34-57	26,49,58,65,83, 90,91,103,109,137,151
INSTRUCTION PLANNING		12-20	61	1-6,8-15,99 106,108,114 120	3-17	23-25, 27-31	7,17,25,41,50, 87,93,136
INSTRUCTION EXECUTION	1-6			26,33-43,45-64,93-98,100-105,107,109-111,113,115-119	18-22	1-11	8,11,16,18,19,21,27,28, 30-32,35,39,40,42,46 53,61,66,57,80,81,101, 112,116,123,142,162,67,69
INSTRUCTION EVALUATION		49-52		16-25,27-32, 44,71,72,112	23-27	26.32.33	24,29,88,100,108,117, 133,141,150,154,158 122
MANAGEMENT	15-21	21-34		65-70	32-38		1,2,9,10,20,22,23,33,34, 38,44,59,60,62,70-73,68 86,96,97,104,115,131,152, 155,156,164
GUIDANCE				82-84	28-31		3,36,45,55,82,95 99,114,118,120,121,153
SCHOOL-COMMUNITY RELATIONS			39-40	128,137			43,47,74,79,84,92,98, 102,119,125-127,129, 130,132,139-140,143, 147,148

TABLE 3C

INDEX OF COMPETENCIES FOR TEACHERS AND TEACHER-COORDINATORS CROSS-REFERENCED BY CLUSTER AND STUDY

CLUSTER	CANFIELD	BENSEN	HARRIS	VOGLER AND PATTON	RICHEY	SPAZIANI AND COURTNEY	PERKINS
STUDENT VOCATIONAL ORGANIZATION	7-14			86-92			144,157,146
COORDINATION			1-11,22-38, 43-45,49-55				55,56,75,76, 78,94,105,111
PROFESSIONAL ROLE AND DEVELOPMENT		1-3,35-48	12-21 46-48	62, 77-79,85,121-127, 129,130,132			4-6,12-15,48, 51,52,63,64, 77,85,89,106, 107,110,113, 124,128,134, 135,138,145, 149,159,160, 161,163

TABLE 4

INDEX OF COMPETENCIES FOR MIDDLE MANAGEMENT CROSS-REFERENCED BY CLUSTER AND STUDY

CLUSTER	TEMPLE UNIVERSITY	PARKS	MEYER, CRAWFORD AND KLAMENS	UNIVERSITY OF PITTSBURGH	HUFFSTUTLER AND McCALLON
PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION	31-33;35-42	21-23	1-173	8;22-26;28-34	1-12;15-17
OPERATIONAL MANAGEMENT	64-75;81-92	1-15	174-211;337-361	5-7;9-21;35-61;	18-28;35-37
STAFF PERSONNEL	34;43-64	16-20		62-80;82	
STUDENT PERSONNEL AND GUIDANCE	76-80	24-32	212-245; 277-306	27;83-87;84-92	13 ;14;29-34; 38-54
SCHOOL-COMMUNITY RELATIONS	3-16		246-276		55-62
PROFESSIONAL ROLE AND DEVELOPMENT	17-30		307-336	1-4	63-80

TABLE 5

INDEX OF COMPETENCIES FOR ADMINISTRATORS CROSS-REFERNCED BY CLUSTER AND STUDY

CLUSTER	TEMPLE UNIVERSITY	SOUTHERN ILLINOIS UNIVERSITY	UNIVERSITY OF PITTSBURGH	J. BALTIMORE	UNIVERSITY OF TENNESSEE	A. CANFIELD	OHIO STATE UNIVERSITY (INSTRUMENT)
PROGRAM ADMINISTRATION	56-76	1-39;77-89; 99-108;114; 118	1-4;27-35	1-7;25-34	9;12;13;16;21; 25;27;31;43; 45;51;52;57; 58;62		1-4;7-15; 18-41;43-51
OPERATIONAL MANAGEMENT	88-128; 132-150;152		5-12; 14-26	23;24; 35-44	22;35;39	1;2,21	160-166
INTERPRETATION OF LEGISLATION	129-131	110; 121;123		17-19;45-47	38;45;56	12-14	16-17
SCHOOL-COMMUNITY RELATIONS	158-164	141-159	13	8-16	1-5;7;8;24; 26;30;32;40; 48;50;53;54; 59;61;64	15,18	5-6;114-140
FINANCES AND FACILITIES	1-25;53-55	124-140	36-62		6;11;20;23; 33;41;42	4;5	141-159; 167-191
STAFF PERSONNEL	26-52;77-87; 151;153;165; 172-195	40-76;90-98; 112;122	63-83	48-53	10;14;15;34; 36;44;49;60; 63;65	3,20	62-96
STUDENT PERSONNEL			84-92	20-22		6,16,19	42;52-61
PROFESSIONAL ROLE AND DEVELOPMENT	154-157; 166-171	109;111;113; 115-117; 119-120			17-19;28;29; 47;55	8-10,17	97-113

INITIAL TEACHER PREPARATION LIST DEVELOPMENT

In synthesizing the lists for initial teacher preparation, it was decided that the Model Curricula for Vocational and Technical Teacher Education developed by Cotrell et al at the Center for Vocational Education, The Ohio State University, would be used as a base for comparison. Functional groupings used by Cotrell were retained. From this base, the following analytical procedures were followed. Competencies in each of the lists were assigned to the appropriate functional grouping [illegible] matched against those in the Model Curricula. Competencies appearing [illegible] other studies but not included in the Model Curricula were added in the appropriate category. From this process, a total universe of competencies from all lists was derived.

Each grouping was then reviewed and duplications eliminated. Also eliminated were statements identified as procedural functions or routine assignments, (e.g. take attendance, write passes). Generic statements so broad as to be unmeasurable in form presented (e.g. maintain good relations with others) were eliminated as well. Competence statements that were identified more extensively as management tasks were reassigned to the middle management or administrator lists, and removed from this list.

The competencies were sequenced according to order of performance and similarity of function. Small tasks listed in individual studies which were part of a larger task were synthesized into one statement representing the larger task, (e.g. sub-components of writing a lesson plan were incorporated into one statement for lesson plan development).

Finally, the competency statements were edited for clarity and face validation of sequence.

MIDDLE MANAGEMENT AND ADMINISTRATION LIST DEVELOPMENT

Synthesis of the middle management and administrator lists were accomplished in a similar manner to the initial teacher preparation competencies, with several minor differences. Since there did not appear to be a "landmark" study at these levels, no single study was used as a basis for comparison. Further, no single set of categories in one study was adopted for this project. The various categories in the existing lists were reviewed, and synthesized categories established. All competencies in each study were then reviewed and placed in the appropriate grouping. Duplications were eliminated. Generic and routine statements were eliminated, using the same criteria as for the initial teacher preparation list.

Competencies more clearly belonging to a different personnel level were then reassigned, statements were sequenced, and reviewed, again following the same procedures used to compile the initial teacher preparation lists.

CAREER EDUCATION COMPETENCY ANALYSIS

The purpose of this phase of the research was to determine those additional competencies needed by school personnel to implement a career education program. The intent was to develop a list of competencies for individuals involved in the implementation of career education, and to determine what percentage of career education competencies relate directly to development of curriculum, to students, to other school personnel and to the community. The procedures for this research are different, and the competency lists shorter, because this study addressed only the unique and additional skills needed for career educators, whereas the vocational lists attempt to identify all pedagogical skills needed by those personnel.

Research was begun by locating existing lists of competencies for career education. Many of these lists were relatively limited and lacking in specificity.

As a second step for initial data, job descriptions, responsibilities, duties and assignments for school personnel in implementing career education were identified.

From these sources of data, comprehensive lists of career education competencies were created for the following personnel areas: Administrators, Coordinators of Career Education Programs, Counselors, Secondary Teachers, Junior High School Teachers and Elementary Teachers. A competency list was also developed for Business, Industry and Labor personnel. Some of these lists contained up to 200 competencies.

The competencies within each personnel level were separated according to the following categories: Curriculum Development, Career Development-Maturity, Community Related Activities, Occupational Information and Activities, Staff Development, and Philosophy pertaining to Career Education.

A synthesized list for each level was then developed. As in the vocational lists, duplicate statements were eliminated, consistency of wording was established, and the competencies were sequenced according to procedure and order of accomplishment.

A questionnaire was then developed for each competency list to test the validity of the competencies among the groups within each questionnaire, and across different personnel levels. Some competencies were placed on several personnel level lists (e.g., job placement competencies) in an attempt to determine which person within the system performs these duties. Other competency statements were placed on all questionnaires (e.g. within the staff development section, the competency,"... to increase interpersonal skills", was retained on all levels; within the philosophy section, the competency, "...ability to explain the career education program to the students et al", was retained on all levels).

After the lists of competencies for each personnel level were derived, a Likert-type scale was developed for rating the competencies. There were two separate areas of evaluation: "Importance" and "Frequency". The importance scale ran from 5 being "critical", 4 "important", 3 "somewhat important", 2 "of little importance" and 1 being "of no value". The frequency scale was also a 5 to 1 scale and ran from "performed daily", to "performed regularly", "performed on occasion", "not performed", and "performed by someone else in the program". This double rating system was important as a competency could be judged to be critical, but not frequently performed, performed by someone else other than the person filling out the questionnaire or not performed at all. An additional column was added to the questionnaire under the heading "not familiar with topic".

A cover sheet was attached to each questionnaire briefly explaining the study. This included: the purpose of the study, the sponsor of the study, the way the results would be used, and the address to which to mail the questionnaires and the demographic data to be included in the interpretation of the competencies.

In order to acquire a broad national sampling of career educators, the questionnaires were taken to the Commissioner's Conference on Career Education held in Houston From November 7-10, 1976. Through individual requests, responses were solicited to the questionnaires from more than 200 participants at the conference. The lists of competencies included in this report were taken from the questionnaires used during the project. The final interpretations have not been completed to date, but will be published in the Phase II report of this research study. A sample questionnaire used is included as Appendix E. Similar questionnaires containing identical formats and demographic data but different competencies were developed for the other five levels of personnel.

CONTINUING RESEARCH

The following pages include the vocational and career education competency lists developed as Phase I of this study, according to the procedures followed. Phase II of this project will provide validation procedures for these materials, and the results of a state needs assessment for professional development. Expert content validation of the vocational competencies will be accomplished through a consensus model. A jury will be established to apply congruence criteria to these lists. A subsequent jury will then be used to establish inter-expert agreement. Appropriate statistical analyses will be applied.

Concurrent validation of the career education competency lists will be achieved through regression models applied to the questionnaire data. The results of this analysis will then be similarly presented to a jury for expert content validation.

The results of these further efforts will be presented in the Phase II report of this project.

COMPETENCY LIST FOR INITIAL TEACHER PREPARATION IN VOCATIONAL EDUCATION

I. PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION

1. Design and conduct a community survey for the geographical area surrounding the school to acquire information about the manpower needs of the community. Involve school staff, representatives from labor, business, industry, and the State Department of Education.

2. Recommend appropriate vocational education programs based upon the findings of the community survey.

3. Identify the role and function of an advisory committee. Screen and identify members to serve on the committee.

4. Orient the advisory committee members to their role and function, and conduct meetings periodically.

5. Serve as the liaison to the advisory committee in developing, interpreting, and implementing scholl policies.

6. Establish the overall purposes and goals of the vocational education program. Base these goals on data indicating structure and manpower needs of the local community, and the philosophy of the general education program of the school.

7. Based upon these purposes and goals, and in concert with the advisory committee, establish the occupations for which training is to be offered in the vocational education program.

8. For each occupation in the vocational education program, identify the competencies needed for entry into the occupation, specify the performance standards for each occupational task, identify the knowledge and attitudes related to each task, and establish an hierarchical order of presenting these tasks for instructional purposes.

9. Develop general objectives and specific performance objectives for the learner to accomplish related to the tasks and activities identified in competence.

10. Establish criteria for evaluating students in each of the performance objectives.

11. Develop equivalent competency tests to use for assessing student competence prior to instruction.

12. Develop admissions critera and procedures, recruitment procedures, and continued evaluation procedures for students in the vocational program.

13. Acquire and analyze follow-up data regarding the placement, employment, and training status of each vocational education graduate.

14. Prepare reports for the school administration, State Department, and community providing follow-up data of the graduates, placement records, students satisfaction with the program, and current employment.

15. Implement all vocational programs in accordance with state law for vocational education.

16. Conduct a review of the literature, obrain curriculum guides, and utilize State guidelines in planning and writing curriculum materials.

17. Develop and implement programs of cooperative education and work study as an integral part of the vocational program.

18. Analyze the long range needs to implement a quality vocational education program regarding facilities, equipment, supplies, personnel, and other resources.

19. Conduct periodic reviews of facilities and equipment to assess their adequacy relative to technological changes in the occupations.

20. Prepare long range educational, personnel, and budget plans for the vocational education program.

21. Plan a strategy for implementing new programs and upgrading existing programs in accordance with technological advances and occupational trends.

22. Use a variety of techniques, strategies, press releases, and documents to develop and maintain a good program image.

II. PLANNING OF INSTRUCTION

23. Determine the major units for a course of study, based upon occupational needs and student needs and interests.

24. Establish the general objectives for each unit in the vocational education program and develop specific student performance objectives within each unit.

25. Sequence the student performance objectives into a hierarchical order that learning progresses sequentially and is related to the completion of the task.

26. Identify and write the learning content for each unit, the performance objectives for the student, teaching strategies, alternative learning activities for students, and student performance standards.

27. Obtain the supportive materials needed for the unit, including tools and equipment, texts, references, and other instructional materials.

28. Develop specific lessons for each of the performance objectives within the unit (or groups of performance objectives) and write specific lesson plans. Each plan should include an introduction, body, and summary. Each lesson plan should also include a description of the student learning activity.

29. Develop supportive instructional materials for implementing teacher lessons. Include charts, programmed material, duplicated material, and overhead transparencies.

30. Utilize audiovisual teaching aids and devices such as movie projectors, film strip projectors, tape recorders and instructional television.

31. Establish criteria for the selection of textbooks, instructional supplies and materials, and commercially developed instructional aids.

32. Combine all material from competencies 23-31 into a comprehensive course of study organized into a course description, performance objectives, instructional content, student learning activities, teacher notes and activities, reference materials, evaluation criteria and support materials.

33. Plan and implement special instructional strategies and activities for disadvantaged and handicapped students.

34. Establish an instructional library with a filing and checkout system for resource materials.

35. Provide student instructional activities and organizational information for substitute teachers.

III. EXECUTION OF INSTRUCTION

36. Involve the student in such field-based instructional activities as field trips, cooperative programs and internships.

37. Conduct student verbal learning activities such as symposiums, brain storming sessions, group discussions, panels, questioning strategies, role playing, simulation and oral questioning. Present information verbally to students through such strategies as case study problems, lectures, illustrated talks and analogies.

38. Present information with such aids as the flannel board, flip chart, chalkboard, bulletin boards, exhibits, models and real objects, overhead projector, and opaque projector.

39. Present visual stimulation through such mediated aids as film strips, slides, sound motion pictures, single concept films and videorecorders.

40. Direct students in instructing other students through such techniques as student presentations, group supervised study and student demonstrations.

41. Use the project method to present information and direct student laboratory experiences.

42. Direct student study of such written materials as textbooks, bulletins, pamphlets, information (assignment) sheets, and operation (job) sheets.

43. Direct students in preparing for laboratory work using job plans. Guide their progress through the use of operation (job) sheets.

44. Use the demonstration method to present a concept or principle, or to demonstrate a manipulative skill.

45. Provide lessons and instructions which include an introduction. Employ non verbal techniques and oral questioning techniques to reinforce learning. Complete the lesson with a lesson summary.

46. Present information through such "non-standard" strategies as team teaching, individualized instruction, and the assistance of a resource person.

47. Individualize the instructional process by providing enriched instruction to the more capable student and remedial work for the slow learner.

48. Direct students in applying problem-solving techniques.

49. Establish a frame of reference from which students may analyze a situation from several points of view.

50. Provide student assignments as follow-up instructional activities.

51. Establish learning environments that use written, teaching-machine and computer-assisted programmed materials.

52. Develop learning experiences that improve skills in all three domains of learning: cognitive, affective, and psychomotor.

53. Use evaluation techniques and strategies as an integral part of the teaching-learning experience.

54. Provide practical shop and laboratory experiences that reinforce classroom learning and provide for skill acquisition.

55. Provide instructions designed to maintain student attention during classroom presentations and demonstrations; and provide motivation for further student activity after the lesson.

56. Relate current events and technological advances associated with the vocational subject matter area to classroom instruction.

57. Assist students in developing study skills and positive work habits.

IV. EVALUATION OF INSTRUCTION

58. Formulate a grading system consistent with school policy. Establish criteria for evaluating student performance based upon classroom instruction and laboratory (or on the job) experience.

59. Evaluate the entire instructional program. Measure student progress against the student performance objective.

60. Develop a system for measuring student progress that will incorporate cognitive, affective, and psychomotor objectives.

61. Consider the cumulative data regarding student ability and past achievement in evaluating current performance.

62. Locate and utilize available standardized tests to measure achievement.

63. Develop an instrument to evaluate the students' work, work attitude, qualities, personal traits and progress on the job.

64. Appraise student products according to occupational performance standards.

65. Appraise student products in relation to student performance objectives.

66. Evaluate individual assignments completed through directed study against student performance objectives.

67. Arrange for students to evaluate their own progress and devise self-evaluation techniques for them to use.

68. Work with students to cooperatively evaluate student performance against criterion measures (such as those identified in competencies 64, 65 and 66).

69. Develop cognitive tests related to the instructional objectives. Use essay type, true/false, completion, matching and multiple choice test items.

70. Develop a system for analyzing test results to measure both student progress and the validity and reliability of the test.

71. Develop a system for measuring laboratory performance that includes an assessment of student progress, laboratory performance tests, laboratory performance rating sheets, and assessment of student-made products.

72. Develop a system of testing students orally, using both teacher-made tests and commercially available products.

73. Develop "case study" situations to test student problem-solving ability.

74. Develop a system for self-evaluation of the instructional process. Assess student progress and/or achievement, and involve the students in the evaluation process. Obtain information from fellow teachers and supervisory personnel.

V. MANAGEMENT

75. Prepare a capital equipment budget proposal for one, five and ten-year periods.

76. Prepare an operating budget proposal for expendable tools, consumable supplies, services, travel, professional memberships, instructional materials and references and periodicals.

77. Recommend subject matter reference books and periodicals that should be placed in the school library.

78. Prepare purchase requests for approved vocational equipment, supplies, and consumable materials.

79. Maintain an inventory of vocational tools, supplies, and equipment.

80. Develop an inventory system for instructional materials and supplies.

81. Establish a system for repairing and servicing tools and equipment in the laboratory.

82. Arrange the layout of the vocational laboratory to simulate the occupational environment and facilitate student performance.

83. Control heat, light, and ventilation in vocational laboratories and classrooms.

84. Establish a policy for use of the physical facilities and equipment by other school personnel and outside groups.

85. Arrange for additional vocational facilities to accommodate expanded enrollments and technological advances.

86. Accept gifts or donations of supplies and equipment in accordance with school policy.

87. Arrange for the storage and security of supplies and equipment. Implement student check-out procedures for tools and equipment.

88. Establish a laboratory personnel system that includes a procedure for cleaning and maintaining the laboratory, and provides maximum usage of laboratory equipment and supplies by students.

89. Devise a system for establishing and collecting student fees for supplies and other instructional costs.

90. Develop and maintain a filing system for records and forms for vocational reports required by the State Department of Education.

91. Develop a comprehensive safety program that includes safety instruction presented to the student, a procedure for attending to the first aid needs of the vocational student, and one that provides approved safety apparel and devices for use around hazardous equipment.

92. Develop and complete student accident reports, using appropriate forms.

93. Interpret the legal and moral provisions of teacher liability.

94. Interpret and uphold legal provisions and regulations governing the employment of student-learners.

95. Establish and conduct a standard order of business each day.

96. Adjust instructional plans and strategies based on observed feedback from students.

97. Work with students to establish acceptable standards of behavior in vocational classrooms and laboratories. Uphold these standards in addition to general school standards of expected student behavior.

98. Encourage students to exercise self-discipline. Employ appropriate disciplinary action when school code standards are violated.

VI. GUIDANCE

99. Develop and maintain individual student files that contain information about the student's background and environment, personal characteristics, subject matter data, achievement, interests, attitudes and attendance.

100. Accumulate occupational information about students through personal interviews, the interpretation of occupational tests and inventories, and through feedback from students regarding occupational inventories.

101. Arrange with professional staff for the administration and interpretation of personality, aptitude and intelligence tests.

102. Work with students in establishing and reviewing their educational aspirations, career aspirations and personal goals.

103. Assist students in self-analysis for such capabilities as personal interests, saleable skills, advanced training needs and study habits.

104. Assist students in developing positive attitudes toward appropriate work habits, quality workmanship, and working effectively with people in various environments.

105. Develop constructive working relationships with students and their families by demonstrating an interest in them as individuals and maintaining an open door policy for student consultation.

106. Confer with students and their parents at school and through home visits to discuss the educational and occupational development of the student.

107. Confer with students on both individual and group bases.

108. Communicate with prospective and continuing students during the summer.

109. Develop and maintain a system for acquiring and updating occupational information and job opportunities.

110. Work with teachers and other qualified resource persons to provide occupational and educational information in helping students address individual concerns.

111. Organize and maintain a job placement program for students.

112. Assist students in securing and completing applications for jobs, scholarships, and educational loans for college admission.

113. Assist graduating students in preparing for interviews with potential employers.

114. Write letters of recommendation for students.

115. Supply guidance staff with performance data about students and exchange information on a continuing basis.

116. Refer students to guidance staff and other specialists as needed.

117. Assist students with their problems by working cooperatively with such outside agencies as health and welfare services.

118. Conduct follow-up studies of former vocational students.

119. Ascertain the reason why students leave or discontinue the vocational education program.

VII. SCHOOL-COMMUNITY RELATIONS

120. Assist in the development of policies regarding school-community relations consistent with the philosophy of the vocational program.

121. Plan, acquire approval for, and conduct school-community relations activities.

122. Speak to school and community groups about the vocational program. Use resources such as radio and television to reach a wider audience.

123. Provide such written materials as brochures, news releases, newspaper articles, and displays to promulgate the program.

124. Sponsor student-parent activities for the vocational education program. Direct student presentations at these activities.

125. Conduct an open house to familiarize the community with the vocational program.

126. Provide consultant services to local business and industry.

127. Assist with community, business, and industry sponsored activities.

128. Serve in professional and community civic, service, and social organizations to improve the image of the vocational education program.

129. Establish and maintain effective relationships with labor, management, and manpower organizations.

130. Maintain liaison with union officials and employers, employment agencies, community organizations, and State Department personnel for the vocational education program.

131. Maintain good relations with other schools. Use these relations to obtain feedback regarding the vocational education program and its status in the community.

132. Analyze enrollment trends to determine student and parental acceptance of the vocational education program.

133. Use parental and community opinion surveys to obtain information about the status of the program.

134. Obtain feedback regarding the program from the advisory committee.

135. Acquire information from members of the community "power structure" regarding their expectations for the vocational education program.

136. Study community voting results on financial issues effecting the vocational education program to determine the level of community support.

137. Study in-school election results (student council, etc.) to determine the image of the vocational student in the school.

138. Develop a procedure to use field-based laboratory experiences provided by citizens in the community as effective student-learning stations.

VIII. STUDENT VOCATIONAL ORGANIZATIONS

139. Obtain approval from the school administration to establish a student vocational organization.

140. Contact State Department personnel to identify the steps to be followed in organizing a student vocational club; solicit help from the State Department in implementing the club.

141. Acquaint prospective members and their parents of the purposes, activities, and values of the student vocational organization.

142. Organize a student steering committee to assess interest in the vocational organization. Conduct organizational meetings, and develop a constitution and by-laws.

143. Conduct initiation activities for the student organization in which new students receive an orientation, and an election and installation of officers is held.

144. Conduct leadership training sessions for the officers of the organization to help them carry out the goals established in the constitution.

145. Work with students to develop a yearly program of work for the student vocational organization.

146. Supervise social and educational activities of the student organization.

147. Involve students, parents, and members of the community in conducting and publicizing the activities of the organization.

148. Develop and monitor a financial management system for the student organization funds. Conduct fund raising events.

149. Maintain a file of publications, handbooks, and scrapbooks regarding the activities of the student organization.

150. Evaluate the student-vocational organization.

151. Affiliate the student vocational organization with state and national vocational organizations. Prepare annual reports, and provide advice for student entries in state and national contests.

152. Send student representatives to district, state, regional, and national student vocational organization activities.

153. Assist in the development of rules and procedures for conducting student contests. Participate and serve as an advisor and/or judge for contests.

154. Maintain the student vocational organization as an integral part of the instructional program for the vocational area.

IX. COORDINATION

155. Conduct occupational tests, student interviews, and parental interviews to gather data regarding student preferences for work sites.

156. Establish criteria and procedures for selecting prospective student-learners for cooperative education.

157. Match student-learner characteristics, interests, and background to appropriate work environments.

158. Establish training stations as acceptable based upon the training potential of the job, the qualifications of the on-the-job instructors, and the educational and safety adequacy of the facility.

159. Negotiate on-the-job training hours, wages, and conditions, consistent with union policy.

160. Develop a training agreement between the student-learner and the cooperating employer that includes school and work schedules, a training plan, and the responsibilities of both the student and trainer.

161. Provide appropriate information and forms regarding federal and state wage and hour classifications, legal safety requirements, work permits, reimbursement information, and other legal issues related to cooperative education.

162. Establish procedures for developing and maintaining good working relationships between the student and the trainer. Include role identification, on-the-job training, initial interviews, and appropriate safety and protection procedures.

163. Develop and implement a plan for supervision of on-the-job training. Share the plan with the school administration and the employing institution.

164. Analyze student progress reports to determine future job potential, additional training needs, and such affective considerations as attendance, promptness, working relationships, etc.

165. Coordinate suggestions from on-the-job trainers to provide related instruction in school for areas of weakness.

166. Evaluate the quality of the on-the-job training received by the student.

167. Sponsor employer-employee appreciation events at the end of training situations.

168. Coordinate related instruction and information from the advisory committee to maintain instruction in the most recent technology of the occupational area.

169. Assist the student in obtaining work placement after training.

170. Conduct conferences with both students and trainers to improve the student performance and specify deficiencies in the training environment.

171. Provide remedial instruction in school to correct on-the-job deficiencies.

172. Develop a positive procedure for removing students from training stations when it is in the best interest of the student or the trainer to terminate the relationship.

X. PROFESSIONAL ROLE AND DEVELOPMENT

173. Promote the attainment of the goals of the teaching profession by maintaining ethical standards.

174. Express a professional philosophy consistent with the goals of the teaching profession in general, the goals of general education, and the goals of vocational education.

175. Exchange observational visits, innovations, and ideas with others in the profession.

176. Support professional organizations through membership and attendance at meetings. Function as an officer or chairman of committees, and provide representation at state, regional, and national meetings.

177. Contribute to the literature of the profession by writing articles or books; or by conducting and/or participating in experimental data-collecting research activities.

178. Assist in orienting new teachers to the school system.

179. Conduct personal evaluation through self-analysis, administrative evaluations, and peer evaluation.

180. Maintain professional certification by enrolling in graduate, extension, and in-service education programs.

181. Expand your educational background and leadership potential by achieving advanced degrees. Maintain a level commensurate with professional abilities and limitations.

182. Keep up-to-date through professional reading and through acquiring new occupational skills. Record these activities in an up-dated professional personnel file.

183. Participate in non-instructional school activities such as clubs, cafeteria supervision, bus duty, etc.

184. Interpret the policies and regulations of the local school district to the student teacher and other potential teachers.

185. Supervise student teachers in a positive fashion by assigning appropriate responsibilities, planning constructive activities, and performing as an effective role model for student teachers.

186. Confer regularly with the student teacher and college supervisor regarding the progress, success, and deficiencies of the student teacher.

187. Prepare proposals for external funding to meet research needs, conduct training programs, develop curriculum, or conduct other activities appropriate to the profession.

188. Read and interpret research findings both as a consumer and researcher.

189. Demonstrate a knowledge of the concepts of career education and its relationship to vocational education.

190. Assemble and maintain professional resource materials for personal use.

191. Demonstrate appropriate working relationships with other teachers in the school.

192. Identify and interpret the major federal legislation which has provided the foundation and current funding for vocational education.

193. Relate the vocational educational curriculum to the total instructional program in a comprehensive high school.

194. Promote unity and balance between the vocational and academic components of the total educational enterprise.

COMPETENCY LIST FOR MIDDLE MANAGEMENT IN VOCATIONAL EDUCATION

I. PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION

1. Develop the rationale, goals, and scope of the vocational education program. Establish the individual curricula that will comprise this program.

2. Collect manpower data for program development. Conduct a community survey in addition to existing data.

3. Develop short and long-range program plans for implementing the program, based upon the rationale, goals, and manpower surveys.

4. Conduct an occupational analysis for each occupation to be taught. Establish the content, the standards of performance for each task, and other data needed for developing performance objectives.

5. Supervise the curriculum development process for new programs, as well as for up-dating curricula of existing programs.

6. Assist staff in developing and implementing courses of study.

7. Assist staff in writing general and specific (performance) objectives for their courses of study.

8. Review and evaluate courses of study developed by the staff.

9. Assist staff in designing teaching strategies. Use appropriate supervisory and helping techniques in this process.

10. Prepare recommendations for course and program changes.

11. Develop and monitor a system for evaluating instructional programs.

12. Conduct continuous evaluation of on-going programs. Prepare and submit reports to appropriate individuals and groups including teachers, school administration, advisory committee, school committee, community groups, etc.

13. Develop cooperative education programs.

14. Develop and maintain an instructional resource center with instructional software and hardware.

15. Identify the role and function of an advisory committee. Establish, utilize, and evaluate the success of advisory committees.

16. Consult with specialists, advisory committees, and administration in the continuous implementation of programs.

17. Assist teachers in the development of a student evaluation system, including performance standards, tests, and a grading system.

18. Develop and administer a system for faculty evaluation that includes teacher self-evaluation, clinical supervision, and administrative and student evaluation.

19. Develop master program schedules for faculty and students.

20. Assess facilities and equipment on a long-term basis for the maintenance and upgrading of the vocational program.

21. Identify the legal and moral implications of student safety precautions, safety regulations, and the implementation of safety programs.

22. Review and implement programs (using federal and state resources where possible) for disadvantaged, handicapped, and other persons not included in regular vocational programs.

II. OPERATIONAL MANAGEMENT

23. Prepare capital outlay budget proposals for one, five, and ten year projections to meet educational goals.

24. Work with faculty to prepare annual operating budgets for personnel, supplies, materials, contracted services, travel, etc.

25. Establish a system for ordering and processing payment for equipment, tools, supplies, reference books, periodicals, and other materials.

26. Establish a perpetual inventory system for equipment, tools, supplies, books, and instructional materials.

27. Assist in procuring surplus equipment from state and federal centers and agencies.

28. Arrange for the storage and security of supplies and equipment.

29. Establish an accounting system for revolving funds that will accommodate the flow of cash for the vocational programs that provide goods and services to the public.

30. Implement a system for approving staff travel and reimbursing travel expenses.

31. Prepare and maintain a schedule of charges for school-produced items and services rendered to the public.

32. Develop a system for determining and collecting student fees.

33. Plan and administer the student transportation system.

34. Determine the needs for adequate and appropriate facilities.

35. Develop a plan to acquire (purchase, lease, or rent) needed facilities and equipment.

36. Recommend changes in facilities as needed to up-date equipment or to expend/contract space for changing student populations.

37. Arrange for the appropriate layout of vocational facilities by either modifying existing facilities or developing new ones.

38. Establish criteria for preparing facility and equipment specifications.

39. Design and implement a safety inspection program of both the physical facilities and the instructional program according to state and federal regulations.

40. Establish procedures for the maintenance, service, and repair of tools and equipment.

41. Supervise the establishment of a system for student check-out procedures for tools and equipment.

42. Supervise the establishment of a student laboratory personnel and clean-up system.

43. Assist in developing regulations for the use of the vocational facilities by outside groups.

44. Interpret and administer federal and state regulations regarding the operation and utilization of vocational facilities and programs.

45. Identify areas and programs eligible for special funding, and develop and submit proposals for these programs.

46. Compile data and prepare reports for the State Department regarding student enrollments and costs.

47. Establish a records management system for students, staff, the physical plant, and public information items.

48. Establish procedures for visitors to the vocational facility and for conducting guest tours.

49. Utilize legal counsel as needed.

50. Develop and utilize teacher and student handbooks of policies, rules, regulations, and operational procedures.

51. Maintain a departmental bulletin board with appropriate faculty information.

52. Develop an organizational structure for the program, identifying personnel relationships and responsibilities.

53. Develop and maintain a public relations program within the school and throughout the community (see section entitled school-community relations.)

III. STAFF PERSONNEL

54. Determine the number of professional and non-professional personnel needed for safe and efficient program operation.

55. Prepare accurate and detailed job descriptions for all positions, establishing the roles, responsibilities, and relationships of every staff member.

56. Develop and implement a system for selecting and employing staff. Include the establishment of selection criteria, conducting interviews, applying screening techniques, and communicating recommendations for employment.

57. Develop and implement an induction and orientation program for new personnel.

58. Implement a checking system regarding the status of staff certification to meet appropriate State Department requirements.

59. Establish a system to record special assignments given to faculty. Maintain an equal distribution of work load among the entire staff.

60. Assist in the development of an equitable and sound salary structure.

61. Maintain a personnel record system for all staff members.

62. Establish criteria for evaluating teaching performance (see program, planning, development, and evaluation section.)

63. Establish a roster of substitute teachers.

64. Serve as the liaison between the vocational programs and other school programs, the community, home, business, labor, and industry.

65. Promote good human relations between the staff members and maintain discretion regarding sensitive information. Involve staff in the decision making process, to the extent possible.

66. Develop and utilize communication procedures for staff members to voice their problems, complaints, and grievances.

67. Be active in local and state associations and encourage faculty to do the same (see professional role and development section.)

68. Plan, direct, and participate in staff meetings. Conduct staff meetings that have clear objectives and measurable outcomes.

69. Develop and participate in in-service programs addressing faculty needs. Include the assistance of teachers in the instructional process, and such administrative functions as developing individual program budgets.

70. Work with staff in conducting on-going research to improve the instructional process in the classroom.

71. Maintain an accurate data-base regarding student achievement and placement.

IV. STUDENT PERSONNEL AND GUIDANCE

72. Establish a basis for determining the total number of students that can be served in each vocational program.

73. Develop and administer procedures for selection, orientation, and registration of students into each program.

74. Supervise a system for maintaining accurate student attendance, autobiographical data, achievement tests, and evaluation records.

75. Use appropriate instruments and tests for measuring student interest and career aspirations.

76. Establish a system that will provide continually up-dated occupational information and job opportunities for students, as well as post-high school training and educational opportunities.

77. Use consultants when needed to provide information and services to students.

78. Select and administer standarized tests as needed for complete student information systems.

79. Develop and implement a system for student follow-up. This system should include placement, employment, and training status of graduates.

80. Establish a system for determining why students drop out of the program.

81. Work with local employment agencies to help students in placement and referral.

82. Be informed of, and comply with, legislation regarding students rights.

83. Provide students with skills in the techniques of interviewing and completing job applications.

84. Write letters of recommendations for students as part of their comprehensive referral folders.

85. Conduct group counseling sessions as needed.

86. Meet with students and parents individually, as appropriate.

87. Administer a safety and medical service programs for students.

88. Develop a system for upholding and administering school standards of student behavior.

89. Develop a program of student government.

90. Approve and administer student social, recreational, and athletic activities.

91. Involve parents and students in student vocational youth organizations for each vocational area. This activity should include: Assisting with the establishment of the organization; conducting meetings; providing leadership training; establishing a program of work; fund-raising activities; conference participation at the local, regional, and state level; conducting public relations; affiliating with state and national student youth organizations; involving business and industry; and providing other activities as appropriate to vocational youth organizations.

V. SCHOOL-COMMUNITY RELATIONS

92. Present a philosophy of vocational education consistent with the goals of the school, the vocational program, and the vocational faculty.

93. Speak to school and community groups regarding vocational education and the specific vocational programs.

94. Work with business, industry, and trade associations in the community through established liaison and placement opportunities.

95. Utilize the advisory councils and committees established for each vocational program.

96. Serve in professional non-vocational organizations in the community, such as civic associations.

97. Serve in professional non-vocational organizations in the community, such as civic associations.

98. Conduct community surveys to obtain objective information and attitudes toward vocational education.

99. Serve as a consultant-at-large to the community regarding vocational education and training programs.

100. Obtain information from parents regarding their perceptions of needs for vocational education programs for their youth.

101. Conduct open houses at least twice a year to bring parents and other members of the community into the vocational facility.

102. Publish news releases and newsletters periodically regarding the activities and successes of the vocational program.

103. Provide brochures that accurately and comprehensively describe the programs offered by the school.

104. Maintain displays of products and services offered by students in the various vocational programs.

VI. PROFESSIONAL ROLE AND DEVELOPMENT

105. Keep abreast of current literature related to vocational and general education.

106. Provide leadership to the faculty by broadening their scope and understanding of the contribution and services of all vocational areas to a total comprehensive program.

107. Serve in a membership and leadership capacity in professional associations related to vocational education at the local, state and national level. Attend conferences regularly; serve on appropriate committees; make presentations at regional and national conferences.

108. Provide in-service education for new teachers regarding school policies, practices, and procedures. Provide professional development for experienced teachers in current research and practice related to the teaching profession.

109. Maintain professional certification through continuous enrollment in graduate, extension, and in-service education.

110. Acquire new occupational skills to keep abreast with advancing technology. Attend industrial schools, training programs, etc.

111. Maintain up-to-date information regarding new occupational materials, methods, and media.

112. Direct research projects for improving programs in your school. Review and report relevant research to your staff.

113. Publish articles and other appropriate materials that contribute to the literature of the profession.

114. Assign responsibilities to the student teacher commensurate with his/her background, knowledge, and experience. Work closely with the college or univeristy supervisor in evaluating the student teacher and assisting in his/her professional growth.

115. Demonstrate exemplary teaching strategies to the staff. Provide clinical supervision for staff as requested.

COMPETENCY LIST FOR ADMINISTRATORS
IN VOCATIONAL EDUCATION

I. PROGRAM ADMINISTRATION

1. Develop a philosophy of vocational education for the school district to provide programmatic direction. Include goals, purposes, objectives, and the integration of the vocational program with general education.

2. Communicate and establish a philosophy of vocational education among the staff that is broad-based across all vocational areas and consistent with the goals of general education.

3. Inform other educators and the general public of the vocational program: its purpose and delivery systems.

4. Design and administer a data analysis and reporting system to provide information for State Department reports and for programmatic decision making. Include surveys to determine manpower needs, community resources, student placement opportunities, parental perceptions of the program, etc.

5. Work with local, state, and federal agencies in determining the occupations for which training is to be offered, and in developing local programs.

6. Prepare annual and long-range program plans.

7. Provide leadership among the vocational faculty for the development of curriculum and instructional guides. Curriculum should be based upon occupational task analyses. Courses of study should include performance objectives.

8. Establish and monitor an instructional resource center for compiling and distributing instructional software and hardware.

9. Establish and administer standards for program and faculty review and evaluation. Assess the quality of instruction.

10. Design and conduct research to measure the results of programs based upon student achievement. These measures should include consideration of both the effectiveness and the efficiency of the programs.

11. Coordinate the activities of the vocational programs in the district so that each component has a relationship to the entire program.

12. Develop and monitor cooperative vocational education programs.

13. Adapt existing instructional programs to provide occupational preparation for students with special needs. Design new programs for special needs populations with unique needs.

14. Develop a schedule of course offerings, and schedule staff and facilities for maximum program utilization. Identify and use consultants for such areas as curriculum development and review, research, and program evaluation.

15. Design and administer a safety program that will meet legal requirements and safety standards for optimal utilization of equipment.

16. Plan and implement adult occupational education programs.

17. Assist in the adoption of text and reference books.

18. Establish policies and develop a policy manual for the total vocational program and staff. This includes both the administration of policies for the entire school district as well as the generation and approval of policies unique to the vocational programs.

19. Provide and solicit suggestions for policy modifications as appropriate.

20. Establish an internal communications system to keep the total staff informed of all aspects of the instructional programs, policies, procedures, instructional methods and materials, etc.

21. Establish and enforce student policies, rules, and regulations.

22. Develop and administer a guidance program.

23. Maintain contact with employment agencies.

24. Establish and maintain a record keeping system for students, teachers, facilities, and equipment.

25. Design and administer a data-gathering system to maintain accurate student records of achievement, interest, career goals, placement, and follow-up data regarding employment and training status of graduates.

26. Establish a system for measuring student satisfaction, and the reasons why students drop out of vocational programs.

27. Work with the guidance personnel to develop a system that provides occupational information, manpower, and placement opportunities on local, state, and national levels.

28. Establish criteria for accepting students into the program and provide data about these students to the staff, as inputs to instructional systems.

29. Establish graduation requirements.

30. Develop and administer a grading system compatible with or convertible to the grading systems used by participating schools in the district.

31. Develop a system for in-service programs on an on-going basis, including such activities as workshops, field trips, guest speakers, etc.

32. Provide leadership in the establishment and functioning of advisory committees for all vocational areas including the recruitment of members, designing the purposes and format of the working relationships within each committee, and evaluating the effectiveness of the advisory groups.

33. Direct pilot and demonstration projects as exemplary programs.

II. OPERATIONAL MANAGEMENT

34. Establish an organizational structure and represent this structure graphically on an organizational chart.

35. Identify the character, purposes, and importance of formal and informal organizational structures, and work within these structures to achieve programmatic goals.

36. Conduct staff meetings, involve members in the discussion, and summarize results. Assure that all meetings contribute toward the achievement of school goals.

37. Design a feedback and follow-up system to provide student evaluation data to the instructional staff.

38. Develop a system for routing printed materials, mail, information and supplies to staff.

39. Inform teachers of current literature, including instructional materials and research projects.

40. Attend county court, city council, and school board meetings in matters relating to vocational education.

41. Prepare reports of school activities for public information.

42. Conduct continuous evaluation of the programs, students, and staff. Insure progress toward the planned program objectives through this evaluation and feedback mechanism.

43. Participate in student assemblies and activities.

44. Analyze and solve daily operational problems; gather facts, ascertain causes, develop alternative courses of action.

45. Interpret, communicate, and administer federal, state, and local policies and regulations that govern and regulate the operation of a vocational program.

46. Develop and maintain up-to-date teacher and student handbooks and written operational procedures.

47. Keep on-going records of students, teachers, equipment and facilities for monthly reports.

48. Request services of State staff and consultants when needed.

49. Serve as the liaisonofficial between the vocational programs and participating schools.

50. Keep participating schools informed of activities of mutual interest and concern.

51. Maintain a record of newspaper clippings of school activities.

52. Develop and implement surveys as needed for data collection.

53. Keep informed of and communicate special federal and state funding opportunities.

54. Utilize legal council for faculty and staff as needed.

55. Establish a school calendar and school closing notice procedures.

56. Monitor the safety program.

57. Develop and monitor in-school student lunch and transportation programs.

III. INTERPRETATION OF LEGISLATION

58. Identify, interpret, and apply federal, state and local vocational education legislation, regulations, and policies, as well as other relevant state and federal legislation (such as CETA).

59. Interpret and implement the state specifications for vocational education facilities.

60. Interpret state certification requirements for instructors.

61. Interpret and apply public "right to know" laws and regulations.

62. Interpret the legal responsibilities of vocational teachers.

63. Explain federal and state legislation to local educators and the community.

64. Utilize State Dept. personnel when their expertise can assist in implementing the vocational program.

65. Cooperate with state staff members in promoting, developing, sustaining and evaluating vocational programs.

66. Prepare project proposals for funding based on State Board of Vocational-Technical and Adult education criteria.

67. Prepare proposals for federal and other state grants.

68. Assist in the development of new legislation to support vocational education.

69. Work with federal and state legislative members to further the cause of vocational education.

IV. SCHOOL-COMMUNITY RELATIONS

70. Plan a comprehensive program of school-community relations to reach both external (community) and internal (school) publics. Involve community representatives in this planning and development process.

71. Describe to vocational education staff members how they can improve their image by productively participating in community, civic, service and/or social organizations.

72. Identify ways of involving the staff in the community to build better public relations for vocational education.

73. Obtain informal feedback on the vocational program by helping your managers to establish contacts with individuals in the school and community.

74. Ascertain and evaluate public opinion about vocational programs through community surveys and other feedback mechanisms.

75. Establish a method for evaluating the degree to which the objectives of the community relations program have been met.

76. Make public presentations to school and community groups about the vocational program.

77. Coordinate the use of occupational (craft) advisory committees, as well as a general vocational advisory council. Establish a handbook explaining the role and function of each committee.

78. Publicize the establishment of the vocational advisory committees, their members, their functions, and the manner in which individuals may participate in these advisory committees.

79. Establish a term of membership and a system of replacing and rotating members of advisory committees.

80. Attend county court, city council, and school board meetings in matters relating to vocational education.

81. Identify supportive community service groups. Assist these groups with their sponsored activities.

82. Hold membership in civic organizations; attend meetings; serve on community committees.

83. Conduct an open house to familiarize members of the school and the community with activities of the vocational program.

84. Write articles for the new media about newsworthy activities being conducted in the vocational program.

85. Provide brochures to acquaint the school and community with various aspects of the vocational program.

86. Work with different racial and ethnic groups to promote good relationships with all segments and special interest groups within the community.

87. Obtain state and federal services and resources in designing and implementing the public relations program.

88. Use business and industrial contacts to assess the effectiveness of the classroom instruction to the needs of the student-learner and to the needs of the prospective employer.

89. Prepare and recommend cooperative agreements with other agencies that may serve as bases for cooperative work-study programs.

90. Meet and confer with visitors. Establish a system for referring visitors to appropriate personnel and for conducting tours.

91. Work closely with teacher education institutions in developing effective programs at the pre-service and in-service levels.

92. Contribute to studies, commissions, and investigations sponsored by professional organizations and governmental agencies.

V. FINANCES & FACILITIES

93. Determine, with selected staff members, the specific needs for adequate and appropriate facilities to operate the established and projected educational programs.

94. Review and approve (or submit to the Board for approval) recommendations for changes and alterations of the physical facilities to provide improvement or expansion of the instructional program.

95. Develop, with selected staff members, a plan to acquire the needed facilities to operate an effective and efficient educational program.

96. Plan vocational laboratory layouts to gain maximum benefits from available space; equip teaching stations to achieve the stated objectives for each program.

97. Review and approve recommendations for new and different types of equipment to keep the instructional program compatible with the needs of business and industry.

98. Arrange for additional vocational education facilities to accommodate expanded enrollments and technological advancements related to the vocational program.

99. Procure when available, surplus equipment, tools, and supplies from state and federal dispersal centers.

100. Recommend to the Board a program to provide regular inspections throughout the school, including instructional areas, to locate hazardous conditions and take those steps needed to correct unsafe conditions.

101. Establish a preventive maintenance program for equipment and facilities.

102. Develop and submit a security system to protect the school building and equipment from damage and theft.

103. Review and approve a system for receiving, storing and distributing all supplies and materials.

104. Develop and submit for approval a policy to regulate the use of the school building and facilities by outside groups and individuals.

105. Set the standards and supervise the quality of the housekeeping throughout the school and grounds.

106. Supervise the development of the operating budget in line with approved program planning and established priorities; allow for flexibility due to price changes, enrollment changes and new products.

107. Analyze the cost of operating each of the instructional programs.

108. Approve and administer an acceptable accounting system, providing for checks and balances and audits, for the control of all appropriated school monies in line with the approved state accounting manual.

109. Direct the development of a fiscal management procedure for acquiring operational funds through taxation, advance payments, vouchers and reimbursements. File reimbursement reports with the State Department of Education.

110. Direct the development of a program of investments and interest-bearing accounts for inactive funds.

111. Supervise the preparation of and submit periodic reports to the governing board and appropriate operating committees relative to the financial status of the school. Prepare local, state and federal reports.

112. Review and approve a perpetual inventory system to accurately account for equipment, tools, supplies and materials.

113. Review and recommend the administrative details of the appropriate insurance programs carried by the school and the insurance program which will be offered to students as school insurance.

114. Develop and administer a system for approving travel expenses for members of the staff.

115. Review and recommend to the governing body a schedule of charges to be made for school-produced items and for services rendered.

116. Establish rates and provide for the collection of student fees.

117. Develop, administer and communicate a procedure for establishing priorities for the use of funds and other available resources.

118. Determine the appropriate criteria for writing specifications for the purchase of equipment, tools and supplies in accordance with the school code.

119. Keep informed of and comply with the regulations regarding the use of bids in the purchase of equipment, supplies and services.

120. Review and submit for approval specifications for the purchase of equipment, tools and supplies.

121. Review and submit for approval appropriate recommendations to the authorized purchasing agent for purchase.

122. Direct preparation of long-range projections of needs for facilities, equipment and supplies and financing of existing and emerging vocational education programs.

123. Direct the preparation of materials for and promotion of passage of bond issues affecting the vocational education programs.

124. Identify major sources of funds for the support of developmental and research programs and effective methods for their procurement.

125. Interpret and apply transportation laws and regulations.

126. Establish a vehicle maintenance program.

127. Schedule and oversee the community's use of the facilities.

VI. STAFF PERSONNEL

128. Develop an organizational structure and chart to show the relationship of each individual to the organization as a whole.

129. Establish an effective "chain of command" with a responsible supervisor at each level.

130. Identify the strengths and weaknesses of each staff member. Assign tasks appropriately and provide helping supervision to overcome weaknesses.

131. Balance work loads and equalize assignments of staff members through effective scheduling.

132. Keep staff members clearly informed as to what is expected of them. Use MBO (Management by Objectives) or other appropriate goal setting and accountability mechanisms.

133. Assist staff members in defining goals, tasks and purposes of new programs as well as developing new approaches to instruction.

134. Identify factors which provide staff members with job satisfaction and/or job dissatisfaction.

135. Incorporate diverse points of view on decision-making regarding controversial issues. Explain your decisions to staff members with the appropriate rationale.

136. Secure assistance from the staff in solving operational program problems. Give due credit to staff members for problem resolution.

137. Maintain staff morale by providing a clear, open, non-threatening forum to address issues of concern.

138. Inform staff members of accepted methods for resolving staff grievances.

139. Develop, maintain and promote good human relationships in all dealings with the staff and student body. Hold inviolate personal, business and political information.

140. Plan and direct staff meetings with specified objectives, interactive communications and measurable outcomes.

141. Determine the number of professional and non-professional support personnel required for the efficient and economical operation of the school.

142. Develop job descriptions for positions, determine sources of applicants and implement a system for the recruitment, screening, interviewing and selection of personnel. Evaluate candidates considering such factors as background, skills, capabilities, philosophy and attitudes.

143. Provide staff orientation regarding the school's philosophy, programs, rules, regulations and working relationships with other personnel.

144. State the legal requirements for dismissal or failure to grant tenure to each staff member.

145. Maintain adequate documentation of personnel regarding job performance. Provide objective accounts and rationale for personnel decisions.

146. Inform individuals in danger of dismissal of the specific reasons for their lack of success. Offer clinical supervision to help staff members overcome their problems.

147. Recommend staff promotions and/or dismissals.

148. Develop a system for checking that all faculty and staff personnel hold valid and appropriate state certification.

149. Develop and submit sound, fair and reasonable personnel policies, including fringe benefits.

150. Coordinate the development and implementation of an equitable and sound salary structure.

151. Administer and maintain a confidential personnel record system for all members of the staff.

152. Prepare and maintain a personnel handbook.

153. Interpret and apply legislation related to labor laws, licensing regulations and affirmative action regulations.

154. Prepare bulletins and other communications designed to keep the staff informed of program and personnel activities.

155. Provide guidance to the staff on legal matters affecting the school program.

156. Schedule staff leaves, vacations and sabbaticals.

157. Approve a roster of substitute teachers.

158. Conduct staff needs assessment for continuing professional development.

159. Design and implement an in-service program for beginning teachers. Develop a program for all staff members to develop optimal relationships in the teaching-learning process. Help each staff member conduct self-analyses to address his/her strengths and weaknesses.

160. Evaluate classroom instruction based on stated program goals and occupational performance standards.

161. Plan with staff members for their continued professional development through specific academic and non-academic experiences.

162. Encourage staff members to pursue academic and work experience to develop or update skills.

163. Arrange for staff exchanges with business and industry.

164. Inform faculty of current literature, research and instructional materials appropriate to their areas.

165. Develop, maintain and promote an active and professional relationship with state, county and local educators.

166. Encourage staff members to maintain membership and participate in the activities of related professional organizations.

167. Encourage teachers to write professional articles.

168. Establish and maintain a staff learning resource center.

169. Foster a climate of interdisciplinary effort to provide broad-based experiences for students.

170. Work closely with teacher education institutions in developing effective programs at the pre-service and in-service levels.

171. Assist supervising teachers in interpreting policies and regulations to student teachers.

VII. STUDENT PERSONNEL

172. Determine and receive approval for the number of students that can be accommodated in each vocational area and in the total program.

173. Develop a system of assessing and reporting information of student characteristics needed for individualizing the instructional program.

174. Develop and approve policies and procedures for the selection, orientation and registration of new students.

175. Be informed of and comply with laws and regulations governing students' rights.

176. Develop and maintain a student handbook.

177. Develop a system for handling discipline cases referred to the administration by the staff.

178. Promote the development of student vocational clubs and the integration of the activities of these clubs into the instructional program.

179. Approve and provide leadership for a program of student government.

180. Provide leadership for the development of a comprehensive guidance program that provides personal, educational and occupational testing and counseling, placement services and follow-up student data.

181. Coordinate and supervise a cooperative work-experience program and a work-study program.

182. Work with participating schools to maintain comprehensive student personnel records, including legally acceptable attendance records.

183. Provide medical service and insurance programs for students.

184. Arrange for student loan, grant and scholarship programs.

VIII. PROFESSIONAL ROLE AND DEVELOPMENT

185. Develop cooperative problem-solving and decision-making skills.

186. Obtain background information concerning controversial issues that require decisions. Make decisions and justify the position taken.

187. Apply MBO (Management by Objectives) techniques to personal work assignments.

188. Promote a professional image through personal appearance and conduct.

189. Maintain ethical standards expected of a professional educator.

190. Demonstrate an acceptable level of personal scholarship and a continuing interest in professional development.

191. Participate in professional meetings and organizations. Serve on professional committees and attend local, state, regional and national conferences.

192. Publish professional articles and reports.

193. Maintain currency in the field through professional readings.

194. Possess a knowledge of the structure of occupations, occupational sociology, industrial relations and industry for planning and implementing vocational programs.

195. Participate in the development of vocational legislation and state plans for vocational education.

196. Cooperate with fellow administrators in educational planning and decision making.

197. Develop program evaluation models incorporating data from students, staff, administrators and outside agencies.

198. Select and use appropriate research designs to solve educational problems and provide data for decision making.

199. Acquire research skills to perform such research as the correlation of manpower needs, student interest and cost-analysis for program planning.

200. Interpret research and statistics. Develop reports using graphs, charts and analytical summaries.

201. Utilize data processing services for research and school data.

CAREER EDUCATION COMPETENCIES NEEDED BY ELEMENTARY TEACHERS

CURRICULUM DEVELOPMENT

1. Assist in writing general career education program objectives.
2. Write specific career education performance objectives for curriculum units.
3. Identify, evaluate and use appropriate commercial materials designed to help pupils perceive the career implications of the subject matter taught.
4. Review and evaluate career education curricula designed and developed by other school districts.
5. Develop teacher-produced materials designed to help pupils perceive the career implications of the subject matter taught.
6. Design and develop facility modifications to optimize career learning environments such as career corners, activity centers, bulletin boards, etc.
7. Assist in the development and procurement of materials for a school-wide career oriented resource center.
8. Infuse "hands-on" (action oriented) experiences in the curriculum to relate academic subject learnings to the world of work.
9. Engage in interdisciplinary experiences integrating academic learnings to increase career awareness and explore basic skills.
10. Integrate academic and occupational information in the curriculum through activity centers and/or units of instruction.
11. Work with guidance staff to implement and improve the career awareness and or exploration program.
12. Engage in classroom-oriented research to validate and measure the effectiveness of the career education activities.

CAREER DEVELOPMENT - MATURITY

13. Help students develop positive attitudes toward themselves and others. Work to to build personally meaningful sets of work values.
14. Provide student awareness experiences stressing present capabilities and interests.
15. Help students develop self-confidence in their ability to fulfill task responsibilities and improve self-esteem.
16. Help students with personal and social problems that hinder self-awareness.
17. Relate the value of basic skills acquisition as a necessary foundation for future occupations.

18. Identify and use appropriate measuring devices for students to use in assessing their interests, attitudes and aptitudes as they relate to future career decisions.

19. Develop experiences which will avoid occupational stereotypes including glamorous occupations and sexrole stereotypes.

COMMUNITY RELATED

20. Conduct career-oriented field trips.

21. Integrate life experiences of teachers, students, parents and resource people in the classroom instruction to provide new models of "behavior" and work roles.

22. Involve parents in students' career development.

23. Identify and utilize resources and/or services available from the community for enriching the career awareness and/or exploration program.

STAFF DEVELOPMENT

24. Become engaged in experiences which will familiarize yourself with the implications of your subject matter to career education.

25. Participate in career education in-service training.

26. Expand your world of work experiences to promote a broader experiential base for teachers in implementing career education.

27. Increase your interpersonal skills in working with a broad spectrum of individuals both within the school and throughout the community.

OCCUPATIONAL INFORMATION AND ACTIVITIES

28. Identify technical competencies and general skills needed for entry into occupations.

29. Relate what students learn in a particular subject area to future education and occupational alternatives, work and living.

30. Direct students in obtaining information on manpower from the local, state employment services.

31. Provide library and research skills for obtaining career, occupational and educational information from such centralized sources as the D.O.T. and through specific methods such as writing letters to employers.

PHILOSOPHY

32. Explain to students et al the career education program.

33. Describe the total career education program, state the goals within your school district and identify your role within the total plan.

34. Foster a climate of cooperation among the faculty to provide broader experiences for the students.

CAREER EDUCATION COMPETENCIES NEEDED BY JUNIOR HIGH SCHOOL TEACHERS

CURRICULUM RELATED

1. Assist in writing general career education program objectives.
2. Write specific career eudcation performance objectives for curriculum units.
3. Identify, evaluate and use appropriate commercial materials designed to help students perceive the career implications of the subject matter taught.
4. Develop teacher-produced materials designed to help pupils perceive the career implications of the subject matter taught.
5. Review and evaluate career education curricula designed and developed by other school districts.
6. Evaluate students products and work according to occupational performance standards.
7. Design and develop facility modifications to optimize career learning environments such as resource centers, exploratory labs, career centers in classrooms, etc.
8. Integrate academic and occupational education relationships into the curriculum through activity centers and/or units of instruction.
9. Infuse into the curriculum experiences in analyzing the tasks and requirements of occupations (occupational clusters) of special interest to the students.
10. Provide broad exploratory, concrete, action-oriented experiences related to the world of work.
11. Infuse into the curriculum experiences exposing students to the organization of the world of work in job clusters or families.
12. Infuse experiences using role models (alumni, siblings, peers, vocational school students, adult workers) to assist in career exploration.
13. Infuse into the curriculum experiences directing students in the use and retrieval of career information from school-wide career-oriented resources (library, counselor).
14. Work with guidance and counseling staff to implement and improve the career awareness and/or exploration program.
15. Provide separate career exploratory courses/programs representing all clusters for all students in the school.

OCCUPATIONAL INFORMATION AND ACTIVITIES

15. Identify technical competencies and general skills needed for entry into occupations and describe occupational performance standards.

17. Collect occupational data from employers to identify community needs.

18. Identify employment requirements, procedures, and opportunities.

19. Provide library and research skills for obtaining career, occupational and educational information from such centralized sources as the D.O.T. and through specific methods such as writing letters to employers.

CAREER DEVELOPMENT - MATURITY

20. Help students develop job-seeking, job-getting and job-keeping skills.

21. Help students acquire decision-making and problem-solving skills.

22. Help students develop positive attitudes toward themselves, others, work and those who work to build personally meaningful sets of work values.

23. Relate what students learn to future education, occupational alternatives, work and living.

24. Provide students with experiences illustrating the interdependence of occupations and how all work contributes to the effective functioning and well-being of society.

25. Direct students in analyzing how social interactions differ among various careers.

26. Direct students in identifying occupations (occupational clusters) that are compatible with their own interests and abilities.

27. Identify and use relevant tests such as the Strong Vocational Interest Battery, Kuder, and Holland Self-directed Search as well as relevant career guidance terminology.

28. Develop experiences which will avoid occupational stereotypes including glamorous occupations and sex-role stereotypes.

COMMUNITY RELATED

29. Identify, interact with, and expeditiously use community and human resources and services available to enrich the career awareness and/or exploration program.

30. Establish and maintain working relationships with local business, industrial and labor personnel in developing and improving career awareness and/or exploration programs.

31. Provide field-based opportunities for students to acquire experiences in business and industry to expand their career awareness and exploration activities.

32. Bring career representatives into the school on a systematic basis to enrich the career awareness and exploration programs.

33. Utilize role models (alumni, siblings, peers, vocational school students, adult workers) to assist in exploration.

34. Help parents understand and encourage the career development process as it relates to their children by actively involving them in career education planning, activities and events.

35. Publicize and promote career education activities within the school and community.

STAFF DEVELOPMENT

36. Participate in career education in-service training.

37. Become engaged in experiences which will familiarize you with the implications of your subject matter to career education.

38. Expand your personal world of work experiences to promote a broader experiential base for teachers in implementing career education.

39. Increase your interpersonal skills in working with a broad spectrum of individuals both within the school and throughout the community.

PHILOSOPHY

40. Explain the career education program to the students et al.

41. Describe the total career education program, state the goals of your school district and identify your role in this program.

42. Foster a climate of cooperation among disciplines to provide broader experiences for students.

CAREER EDUCATION COMPETENCIES NEEDED BY SECONDARY TEACHERS

CURRICULUM DEVELOPMENT

1. Assist in writing general career education program objectives.

2. Write specific career education performance objectives for curriculum units.

3. Identify, evaluate and use appropriate commercial materials designed to help pupils perceive the career implications of the subject matter taught.

4. Review and evaluate career education curricula designed and developed by other school districts.

5. Develop teacher-produced materials designed to help pupils perceive the career implications of the subject matter taught.

6. Integrate into the curriculum skills and experiences to provide students with specific competencies at a level that will enable them to gain entry into the occupational environment.

7. Evaluate students' products and work according to occupational performance standards.

8. Design and develop facility modifications to optimize career learning environments.

9. Infuse into the curriculum experiences in analyzing the tasks and requirements of occupations of special interest to the students.

10. Integrate academic and vocational skill relationships into the curriculum through special projects and/or units of instruction (eg. school newspapers, student run school stores).

11. Work with guidance and counseling staff to implement and improve the career awareness and/or exploration program.

12. Provide for career preparation experiences sufficient to enable the individual to acquire skills necessary to succeed at his/her chosen occupation, within his/her capabilities.

COMMUNITY RELATED

13. Identify and utilize resources and/or services available from the community for enriching the career preparation program.

14. Establish and maintain working relationships with local business, industry and labor personnel in developing the career preparation program.

15. Conduct career-oriented field trips.

16. Provide experiences for students to work in business and industry to gain first-hand knowledge of the world of work (eg. cooperative education, internships).

17. Monitor student field-based activities through on-site visitations.

18. Utilize role models (alumni, siblings, peers, vocational students, adult workers) to assist in exploration.

19. Help parents understand and encourage the career development process as it relates to their children by actively involving them in career education planning, activities and events.

20. Publicize and promote career education activities within the school and community.

OCCUPATIONAL INFORMATION AND ACTIVITIES

21. Identify technical competencies and general skills for entry into occupations and describe occupational performance standards.

22. Gather and disseminate information concerning work permit procedures, child labor laws, provisions of the Industrial Welfare Commission Orders and the Fair Labor Standards Act and other statutes and regulations governing employment of students.

23. Utilize and disseminate knowledge of current issues in the world of work, education, rehabilitation, and community service to enrich the students' career preparation activities.

24. Present information to students on occupational opportunities.

25. Coordinate student placement services for work or advanced education as the student leaves the formal school environment.

CAREER DEVELOPMENT - MATURITY

26. Identify and utilize relevant test such as the Strong Vocational Interest Battery, Kuder, and Holland Self-directed Search as well as relevant career guidance terminology.

27. Counsel students concerning career goals, educational requirements for employment in these areas, availability of jobs, work conditions, etc.

28. Prepare students for job interviews, provide group guidance sessions for job hunting and job keeping skills.

29. Help students develop positive attitudes toward themselves, others, work, and those who work.

30. Reinforce steps in decision-making and planning, and the importance of students being responsible for their own decisions.

31. Help students determine career options appropriate to their levels of career maturity and career goals.

32. Provide for the easy transition of students from one type of school environment to another, and from school to further education or employment.

33. Provide experiences to help students increase their depth of understanding of personal capabilities, interests and possible limitations.

34. Provide opportunities for the individual to experience work first-hand in a non-threatening environment.

STAFF DEVELOPMENT

35. Increase your interpersonal skills in working with a broad spectrum of individuals both within the school and throughout the community.

36. Participate in career education in-service training.

37. Expand your personal world of work experiences to promote a broader experiential base in implementing career education.

38. Become engaged in experiences which will familiarize yourself with the implications of your subject matter to career education.

PHILOSOPHY

39. Explain the career education program to students et al.

40. Describe the total career education program, state the goals of your school district and identify your role in this program.

41. Foster a climate of cooperation among disciplines to provide broader career education experiences for the students.

OCCUPATIONAL INFORMATION AND ACTIVITIES

42. Develop experiences that will avoid occupational stereotypes and expose students to atypical and non-glamour occupations.

CAREER EDUCATION COMPETENCIES NEEDED BY COUNSELORS

CURRICULUM DEVELOPMENT

1. Assist in writing general career education program objectives.
2. Write specific career education performance objectives for curriculum units.
3. Identify, evaluate and use appropriate commercial materials designed to help students perceive the career implications of the subject matter taught.
4. Develop teacher-produced materials designed to help pupils perceive the career implications of the subject matter taught.
5. Review and evaluate career education curricula designed and developed by other school districts.
6. Provide leadership in career testing.
7. Identify the occupational composition of the community and plan and implement a program of school-community relations.
8. Integrate academic and vocational skill relationships into the curriculum through activity centers, units of instruction and/or programs of career guidance.
9. Infuse affective career education concepts into the curriculum.
10. Develop and design facility modifications to optimize career learning environments such as career resource centers.
11. Maintain a library of up-to-date occupational information and placement opportunities (both educational and occupational).

CAREER DEVELOPMENT - MATURITY

12. Identify and use appropriate measuring devices for students to use in assessing their interests, attitudes, and aptitudes as they relate to future career decisions.
13. Help pupils develop, clarify and assimilate personally meaningful sets of work values.
14. Provide experiences to broaden the students' range of career and self-awareness.
15. Help students in the total career development process, including the making and implementation of career decisions.
16. Help students acquire job-seeking, job-getting and keeping skills within a career guidance program.

17. Counsel students concerning career goals, education requirements for employment in these areas, availability of jobs work conditions etc.

18. Develop experiences which will avoid occupational stereotypes and expose students to atypical and non-glamourous occupations.

COMMUNITY RELATED

19. Identify, interact with and expeditiously use community and human resources and services available to enrich the career education program.

20. Serve as a liaison between the school and the business-industry-labor, community and parent organizations.

21. Implement career education concepts within the home and family structure.

22. Publicize and promote career education program activities within community and school.

23. Research and compile lists of resource people within the community and school to enrich the career education program.

24. Monitor student filed-based activities through on-site visitations.

25. Write and administer questionnaires and conduct interviews for both preparation and follow-up of field trips related to career education.

OCCUPATIONAL INFORMATION AND ACTIVITIES

26. Participate in the job placement process.

27. Set up and maintain an active file of student applications and/or exploratory job stations.

28. Conduct data-gathering assessments (surveys, etc.) for such information as manpower data, placement opportunities, student success, student satisfaction, etc.

29. Help the classroom teachers implement career education in the classroom.

30. Provide teachers with instruction in the use of media and materials designed to be used in career education including self-directed exploratory programs.

31. Gather and disseminate information concerning career education programs, events, new materials, workshops, etc. to other school staff.

32. Demonstrate guidance techniques such as constructing and using rating scales, using role playing, constructing job ladders and lattices, interviewing techniques.

33. Research and disseminate information concerning current issues in the world of work, education, rehabilitation and community service.

34. Identify technical competencies and basic skills needed for entry into occupations and describe occupational standards of performance.

35. Acquaint students with career education information areas located within the school and assist them in locating and using occupational education materials and information.

36. Develop a career education resource center including occupational and education materials, resource persons, manpower data, assessment instruments, etc.

STAFF DEVELOPMENT

37. Plan and conduct career education in-service workshops.

38. Increase your interpersonal skills in working with a broad spectrum of individuals both within the school and throughout the community.

39. Expand your personal world of work experiences to promote a broader experiential base for teachers in implementing career education.

40. Participate in career education in-service training.

PHILOSOPHY

41. Explain the career education program to students et al.

42. Describe the total career education program, stating the goals within your school district, identifying your role and stating goals of the state department of education.

CAREER EDUCATION COMPETENCIES NEEDED BY COORDINATORS

CURRICULUM DEVELOPMENT

1. Coordinate the development of general career education program objectives.
2. Write specific career education performance objectives for curriculum units.
3. Identify, evaluate and provide appropriate commercial materials for use by the teacher; designed to help students perceive the career implications of the subject matter taught.
4. Coordinate the development of teacher-produced materials designed to help pupils perceive the career implications of the subject matter taught.
5. Review and evaluate career education curricula designed and developed by other school districts.
6. Identify, evaluate and use career education evaluation instruments for courses, program and instructional materials.

COMMUNITY RELATED

7. Identify, interact with and expeditiously use community and human resources available to enrich the career education program.
8. Establish and maintain working relationships with local business, industry and labor as well as community personnel in developing and improving the career education program.
9. Call on previous or potential work environments to promote jobs, job stations, potential internships, or cooperative work environments.
10. Monitor the progress of field-based students through on-site visitations.
11. Serve as a resource to students, teachers, and counselors for career-related matters and materials.
12. Involve volunteer helpers in the career education process.
13. Help parents understand and encourage the career development process as it relates to their children by involving them in career education plans, activities and events.
14. Publicize and promote career education activities within the school and community.
15. Develop and maintain a resource file of personnel in the community interested in participating in the career education program. Provide a list of the most appropriate individuals for each teacher to meet his/her objectives.

16. Coordinate all contacts and follow-ups of community personnel

OCCUPATIONAL INFORMATION AND ACTIVITIES

17. Place students in paid or unpaid work experiences, take job orders, process applications etc.

18. Set up and maintain an active file of students' applications and/or exploratory job stations.

19. Conduct data-gathering assessments (surveys, etc.) for such information as manpower data, placement opportunities, student success, student satisfaction, etc.

20. Help school staff infuse career education into the school program and direct school-wide career education activities.

21. Provide teachers with instruction in the use of media and materials designed to be used in career education, including self-directed exploratory programs.

22. Gather and disseminate information concerning career education programs, events, new materials, workshops etc. to other school staff.

23. Coordinate and make available the instructional services of the school system to all personnel.

24. Research and disseminate information concerning current issues of the world of work, education, rehabilitation and community services.

25. Gather and disseminate information concerning work permit procedures, child labor laws, provisions of the Industrial Welfare Commission Orders, and the Fair Labor Standards Act and other statutes and regulations governing employment of students.

26. Demonstrate career guidance techniques such as constructing and using rating scales, using role playing, constructing job ladders and lattices, interviewing techniques.

27. Identify the technical competencies and basic skills needed for entry into occupations and describe occupational standards of performance.

28. Acquaint students with career education information areas located within the school and assist them in locating and using occupational education material and information.

29. Develop a career education information service to gather, disseminate, and evaluate occupational information.

CAREER DEVELOPMENT - MATURITY

30. Identify and use appropriate measuring devices for students to use in assessing their interests, attitudes and apitudes as they relate to future career decisions.

31. Plan and coordinate special programs of instruction to provide career guidance, career experiences at the awareness, exploration and preparation levels, and career information.

32. Help students develop, clarify and assimilate personally meaningful sets of work values.

33. Help students acquire and reinforce decision making and planning skills.

34. Provide experiences to broaden each student's range of career awareness.

35. Counsel students concerning career goals, educational requirements for employment in these areas, availability of jobs, work conditions etc.

36. Develop and coordinate experiences which will avoid occupational stereotypes including glamorous occupations and sex-role stereotypes.

STAFF DEVELOPMENT

37. Participate in career education in-service training.

38. Set up and conduct career education in-service professional development workshops for the faculty in your school district.

39. Increase your interpersonal skills in working with a broad spectrum of individuals both within the school and throughout the community.

40. Expand your personal world of work experiences to promote a broader experiential base for teachers in implementing career education.

PHILOSOPHY

41. Explain the career education program to students et al.

42. Foster a climate in which teachers look for ways to cooperate with other disciplines in providing broader experiences for students.

43. Describe the total career education program, stating the goals within your school district, identifying your role and stating goals of the state department of education.

CAREER EDUCATION COMPETENCIES NEEDED BY ADMINISTRATORS

CURRICULUM DEVELOPMENT

1. Establish the curriculum priorities within the school system at the awareness, exploration and preparation levels to meet the overall philosophy and goals of the total career education program.

2. Provide leadership for writing general career education program goals and objectives.

3. Authorize teachers to produce materials designed to help pupils perceive the career implications of the subject matter taught; supervise and evaluate the materials developed.

4. Identify and evaluate appropriate commercial materials designed to help students perceive the career implications of the subject matter taught. Purchase and distribute materials to appropriate personnel.

5. Review and evaluate career education curricula designed and developed by other school districts.

6. Research and develop a plan for the implementation and evaluation of a curriculum that integrates career education into the school.

7. Utilize career education accountability models for program evaluation of the total curriculum, delivery system and personnel.

8. Design and develop facility modifications to optimize career learning environments.

CAREER DEVELOPMENT - MATURITY

9. Coordinate a career development program implementing career development theory from the awareness to preparation stages.

10. Coordinate activities of guidance personnel, teachers and coordinators according to the career education model theories.

11. Design and administer an assessment system for measuring student growth in career maturity.

12. Develop special activities to meet unique needs of the students (e.g. interviewing techniques, values clarification, etc.)

PHILOSOPHY

13. Be knowledgeable concerning state and district curriculum goals for career education.

14. Explain the career education program to students et al.

15. Describe the total career education program, stating goals to be achieved in the school district, and identifying your role within the program.

ADMINISTRATORS

16. Recommend and establish school system policies for the career education program.

17. Identify roles of all school personnel, prepare job descriptions and employ personnel as appropriate to implement the career education program.

STAFF DEVELOPMENT

18. Offer in-service programs designed to provide staff with career education concepts, procedures and materials.

19. Increase your interpersonal skills in working with a broad spectrum of individuals both within the school and throughout the community.

20. Expand your personal world of work experiences to promote a broader experiential base for teachers in implementing career education.

COMMUNITY RELATED

21. Interact with and expeditiously use community and human resources available for career education.

22. Monitor students in field-based activities through on-site visitations, phone calls or mailings.

23. Establish a cooperative working relationship between the classroom teacher, the guidance counselor and occupational teachers.

24. Provide a liaison between student, teacher, parents, and community.

25. Involve the widest possible community participation in career education policy decision making and career education activities.

26. Obtain public commitment and cooperation of the Board of Education, teacher organizations, and community organizations for the career education program.

27. Bring together and coordinate the personnel, resources, facilities and activities of the subsystems that exist within the district.

28. Publicize and promote career education activities and programs within the community.

OCCUPATIONAL INFORMATION AND ACTIVITIES

29. Set up and maintain an active file of student applications and/or exploratory job stations.

30. Plan and direct implementation of job promotion and supervision techniques for career education school personnel.

31. Identify and define the school's role in student placement and coordinate placement service.

32. Establish career education persormance standards.

ADMINISTRATORS

33. Collect occupational data from employers to identify community needs.

34. Organize, establish and evaluate career education instructional resource centers at various instructional levels.

35. Research and disseminate information concerning current issues in the world of work, education, rehabilitation and community services to staff.

36. Gather and disseminate information concerning career programs, new materials, workshops, etc. to school staff.

37. Coordinate and make available instructional services of the school system to all personnel.

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CHAPTER FOUR

SUMMARY, FINDINGS, AND RECOMMENDATIONS

Summary of the Project

This report contains the summary findings of the first phase of a continuing project supported by the Office of Professional Development, Division of Occupational Education, Massachusetts State Department of Education. The overall purpose of this project is to assess the long range certification (approval) and professional development needs for occupational and career education in the Commonwealth of Massachusetts. The first phase of this project, conducted from June, 1976, through September, 1976, analyzed competency-based vocational teacher education as a basis for establishing the content for teacher approval and professional development programs.

This project was undertaken in response to the concerns of educators, state officials, and citizens in the Commonwealth in the areas of teacher preparation, professional development, and certification of occupational and career education personnel serving students in Massachusetts. It was developed also as an integral part of a desire in the Commonwealth to examine the competency-based teacher education movement, its current "state-of-the-art," and its implications. Consequently, the task of the first phase of this project was to identify those competencies needed for occupational and career education personnel at various levels.

In accomplishing this task, the project investigators determined that a significant amount of work had been conducted throughout the United States within the past ten years in identifying competencies needed by occupational and career education personnel. Such landmark studies as the Model Curricula for Vocational-Technical Education developed by the Center for Vocational Education, the Ohio State University, are cited as examples of this effort. Rather than initiate an entirely new effort ignoring these prior efforts, it was determined that the more viable approach would be to search, utilize, and build upon the research efforts already conducted in the field. Using this prior data base lends initial content and concurrent validity to the competencies prepared for the Commonwealth of Massachusetts.

The first stage of this project was to conduct a literature search of trends and research projects related to professional training and development of vocational education personnel across the United States, and to review other national studies related to competency-based teacher education. Those studies identified and used in this effort are included in the bibliography of this research, and the specific competencies identified from each of these studies are included in the appendixes to this report. This study may be used, therefore, as a single compilation of the current published studies in this area.

Once these lists were identified, procedures were established whereby each list was first categorized into appropriate levels. The vocational education lists were divided into those designed for the initial preparation of teachers; those for the professional development of middle-management personnel; and those developed for leadership and administration of vocational education. The career education competency lists were divided into those competencies needed to implement career education by elementary school teachers; middle school teachers; senior high school academic teachers; counselors; coordinators; and directors.

Within each list all competencies were then reviewed and placed in appropriate functional groupings common to all lists at that level. The assignment of each competency into its functional grouping is shown in the tables presented in Chapter 3 of this study. Competencies within each functional grouping across all studies were then screened, criteria applied, and one synthesized list was developed for each level. A detailed description of the procedures used to develop these lists may be found in Chapter 3 of this study.

The next step in this project, to be undertaken as the first half of Phase II of this effort, will be the validation of these lists. Content and concurrent validation will be assessed applying consensus models and appropriate statistical procedures. The results of these validations will be published as the Phase II report. The user of this document is cautioned, therefore, that while these lists have a level of content validity in that they were developed from prior studies, the final validation of these particular lists is yet to be conducted during the next six months.
The next sections of this chapter identify the programmatic recommendations and findings from this report, as well as the recommendations for further study.

Programmatic Findings and Recommendations

The following findings and recommendations are based upon the review of the literature, procedures used in this study, and observations of the researchers. As such, they are not statistically validated at this time. It is believed, however, that the overall findings and recommendations are sound, based upon an extensive review of the literature. It is anticipated, furthermore, that the validation being conducted at this time will substantially support the first phase of this study.

1. Competency-based vocational teacher education has enjoyed widespread acceptance, growth, and implementation throughout the United States during the past five years. This acceptance and implementation lends support for the field testing of such models within the Commonwealth of Massachusetts.
2. There is confusion between the concepts of competency-based teacher education, field-based teacher education, individualized instruction, and self-paced instruction. While many models incorporate all these programmatic components, these concepts are not co-requisite in the implementation of competency-based teacher education. Institutions implementing models in the future should carefully consider competency-based programs that include some or all aspects of these other concepts. Models should be developed using various modes of instruction to test the viability of competency-based teacher education within several delivery systems.

3. It is recommended that the Commonwealth of Massachusetts institute three exemplary competency-based teacher education programs for vocational educators; one for the initial preparation of vocational educators, one for the preparation of middle managers, and one for the preparation of administrators for vocational education.
4. It is recommended that the Commonwealth of Massachusetts establish competency standards for approving (certifying) teachers as career education coordinators. This would be a "second level" certification for a person who is already certified as a teacher in a particular subject area.
5. It is recommended that once the certification is established for career education, competency-based programs for certifying teachers as career education coordinators be established as exemplary models.
6. Current teacher education programs at all levels for vocational and/or career education should be reviewed vis a vis the competency lists derived in this study. Recommendations for modification of existing programs should be considered, based upon these identified competencies.
7. It is recommended that the competency lists in this study be used as a basis for the review of current certification (approval) standards for vocational and career education. It is recommended further that procedures for validating competency (coursework, examinations, etc.) be reviewed to insure that they are based upon competencies needed by these personnel.

8. It is recommended that personnel development workshops be established to address functional groupings of competencies. In this manner, continuing professional development and in-service education may be conducted to accomplish specific short-term objectives.
9. It is recommended that the EPDA, Section 553 programs be developed from competency-based needs for professional development, using the references cited in this study.

Recommendations for Further Study

The previous section of this chapter describes the recommendations for program development, based upon this report. These recommendations were formulated from the review of the literature, conduct of the study, and meetings with professional personnel in occupational education throughout the Commonwealth of Massachusetts.

The following recommendations are for further study and research in the area of professional development.

1. It is recommended that the nine competency lists developed in Phase I of this project be validated, using the procedures as described in Chapter 3 of this study.
2. It is recommended that a needs assessment be conducted for all occupational, vocational, and career education personnel within the Commonwealth of Massachusetts to determine short and long-term (five years) personnel needs. This professional development survey may then serve as the basis for the design and implementation of appropriate programs.

3. It is recommended that a "state-of-the-art" study be conducted among all comparable Divisions of Occupational Education throughout the United States to ascertain current practices and procedures for professional development. Such issues as relationships with teacher education institutions, certification requirements, certification procedures, certification examinations, EPDA activities, etc., should be assessed. This analysis may serve as a basis for reviewing the current activities of the Commonwealth of Massachusetts in relationship to general activities of a similar nature being conducted throughout the nation.
4. Models for competency-based vocational teacher preparation and professional development should be designed and implemented at exemplary sites.
5. Models for urban and rural teacher preparation should be implemented. Such models should be evaluated for effectiveness and efficiency to determine the most appropriate delivery system for Massachusetts.
6. Current certification (approval) processes, procedures, and examinations should be reviewed in light of this study and the other studies to be conducted in Phase II of this project. The capability of the Office of Professional Development to deliver these services under its current personnel work loads should be assessed as well.

7. The viability of working with selected teacher education institutions to serve as Centers for Vocational Education to manage and monitor the approval process, under the direction of the Office of Professional Development, should be explored.
8. A group of local administrators, State Department personnel, and teacher educators should collaborate on a continuing and on-going basis to ensure the quality of communication and program development for the certification (approval) process.

A number of the recommendations listed above will be conducted through the initial part of Phase II of this study. Specifically, Phase II will address the following issues:

1. Validation of the competency lists developed in this project.
2. Administration and analysis of a personnel needs survey to be delivered throughout the Commonwealth of Massachusetts.
3. Administration and analysis of a status survey regarding activities, policies, practices, and procedures of Offices of Professional Development for Occupational Education throughout the United States.

APPENDIX A

Competency Lists - Part 1: Model Curricula for Vocational and Technical Teacher Education: Performance Elements and Examples of Module Titles and Performance Objectives

Calvin J. Cotrell et al, Model Curricula for Vocational and Technical Teacher Education. Columbus, Ohio: The Center for Vocational and Technical Education, Ohio State University, 1971.

MASTER LIST OF CATEGORIES AND PERFORMANCE ELEMENTS

I. Program Planning, Development, and Evaluation

1. Organize a steering committee to assist in the preplanning activities of a community survey.
2. Identify the geographical area in which a community survey will be conducted.
3. Obtain administrative approval for conducting a community survey.
4. Solicit assistance of the vocational education personnel from the state department and/or university in conducting a community survey.
5. Adapt existing community survey materials to local needs.
6. Consult the chamber of commerce to identify area employers to be contacted in a community survey.
7. Consult the local office of the U.S. Employment Service to obtain information on manpower trends and needs.
8. Persuade labor representatives to participate in a community survey.
9. Involve the steering committee in conducting a community survey.
10. Recruit teachers and guidance personnel to participate in conducting a community survey.
11. Establish communication with employer representatives who will be involved in a community survey.
12. Devise a plan of activities for the survey staff to follow in conducting a community survey.

13. Publicize the purposes and objectives of a community survey.

14. Orient the survey staff to their duties and responsibilities in collecting occupational data.

15. Direct students in the collection of data for a community survey.

16. Collect occupational data from employers to identify vocational education needs.

17. Collect student occupational interest data to identify vocational education needs.

18. Recommend a vocational education program based on the findings of a community survey.

19. Disseminate the findings of a community finding.

20. Identify the role and function of the advisory committee.

21. Establish the criteria for selection of the advisory committee members.

22. Obtain school board authorization for organizing the advisory committee.

23. Obtain administrative approval of the selected advisory committee members.

24. Publicize to the school and community the establishment of advisory committee, its members, and its function.

25. Orient the advisory committee members to their role and function.

26. Plan the annual agenda to be considered by the advisory committee.

27. Communicate the date, place, and agenda for the advisory committee meetings to all persons concerned.

28. Invite resource persons who can provide consultation service to attend the advisory committee meetings.

29. Serve as the liaison for advisory committee and the school administration.

30. Assist in the identification of the school's vocational education purposes and goals.

31. Determine the occupations for which training is to be offered in the vocational education program.

32. Consult the advisory committee in planning an analysis of an occupation.

33. Analyze occupations with the assistance of employers and labor representatives.

34. Identify the competencies needed for entry into an occupation.

35. Describe the occupational standards of performance for each task in an occupation.

36. Assist in writing general objectives for the vocational education program offerings.

37. Develop vocational education offerings by clustering and sequencing related tasks.

38. Identify the knowledge and attitudes required for the performance of each task included in a vocational education offering.

39. Write student performance objectives for the vocational education offering.

40. Consult the advisory committee in developing a long-range program plan for vocational education.

41. Analyze long-range needs for the offerings of the vocational education program.

42. Specify the long-range facility, equipment, and supply needs for the vocational education program.

43. Assist in the preparation of a long-range budget for the vocational education program.

44. Identify the long-range needs for employing faculty for the vocational education program.

45. Assist in preparing the long-range program plan for vocational education.

46. Analyze continual follow-up information on the placement, employment, and training status of each graduate of the vocational education program.

47. Obtain follow-up data from employers of graduates of the vocational education program.

48. Determine the reasons students leave the vocational education program.

49. Review supervisory evaluation reports for assessing the vocational education program.

50. Assess the relevancy of the vocational education offerings.

51. Disseminate a summary of the vocational education program evaluation to administrators, advisory committee members, and members of the board of education.

II. Planning of Instruction

52. Review general objectives for the vocational education offerings.

53. Review student performance objectives developed for the vocational education offerings.

54. Sequence student performance objectives for an offering in the vocational education program.

55. Determine student needs and interests.

56. Involve the students in planning a unit.

57. Select student performance objectives for a unit.

58. Write content outline for a unit.

59. Correlate unit content with on-the-job and/or laboratory experiences.

60. Determine for a unit group and individual learning experiences based on individual differences of students.

61. Select methods of evaluating student performance throughout a unit.

62. Identify the student performance objectives for a lesson.

63. Select teaching techniques for a lesson.

64. Plan the introduction of a lesson.

65. Plan the content of a lesson.

66. Plan the summary of a lesson.

67. Plan student learning experiences for a lesson.

68. Select methods of evaluating students' attainment of specific student performance objectives.

69. Write a lesson plan.

70. Obtain textbook, reference, and other instructional materials.

71. Select tools and/or equipment for a lesson.

72. Assemble consumable supplies for instructional purposes.

73. Develop original instructional materials such as individualized related assignment sheets, transparencies, and charts.

74. Involve students in the preparation of instructional materials.

75. Obtain programmed instructional materials.

76. Prepare instructional materials with a spirit duplicator.

77. Prepare instructional materials with a stencil duplicater.

78. Prepare instructional materials (hard copy and transparency)

III. Execution of Instruction

79. Conduct field trips.

80. Direct students in gathering information from sources in the community.

81. Conduct symposiums.

82. Conduct brainstorming sessions.

83. Direct student presentations.

84. Direct students in instructing other students.

85. Direct simulation techniques.

86. Conduct group supervised study.

87. Direct student laboratory experience.

88. Direct students in applying problem-solving techniques.

89. Present information through case study problems.

90. Present information by the project method.

91. Direct student study of textbooks, bullentins, and pamphlets.

92. Direct student study of information and assignment sheets.

93. Direct students in preparing laboratory work or job plans.

94. Guide student progress through the use of operation and/or job sheets.

95. Lead group discussions.

96. Conduct panel discussions.

97. Conduct buzz groups.

98. Employ the question box technique.

99. Employ role-playing techniques.

100. Introduce a lesson.

101. Obtain summary for a lesson.

102. Employ oral questioning techniques.

103. Acknowledge student verbal and non-verbal cues.

104. Enrich instruction to challenge the abilities of the more capable student.

105. Reinforce learning.

106. Provide remedial work for slow learners.

107. Employ reward techniques.

108. Establish frames of reference to enable the students to understand a situation from several points of view.

109. Apply nonverbal techniques.

110. Demonstrate a manipulative skill.

111. Present a concept or principle through a demonstration.

112. Give a lecture.

113. Give an illustrated talk.

114. Present information with analogies.

115. Present information by use of individualized instruction.

116. Present information through team teaching.

117. Give an assignment.

118. Present information with the assistance of a resource person.

119. Present information with bullentin boards.

120. Present information with exhibits.

121. Illustrate with models and real objects.

122. Present information with an overhead projector.

123. Present information wih an opaque projector.

124. Present information with filmstrips.

125. Present information with slides.

126. Present information with sound motion pictures.

127. Present information with single concept films.

128. Present information with an audio recorder.

129. Present information with a video recorder or closed circuit television.

130. Present information with a tele-lecture.

131. Present information with a record player.

132. Present information with educational television.

133. Direct teaching-machine programmed instruction.

134. Present information by computer-assisted instruction.

135. Direct written programmed instruction.

136. Present information with the aid of a flannel board.

137. Present information with the aid of a flip chart.

138. Present information with the aid of a chalkboard.

IV. Evaluation of Instruction

139. Establish criteria for student performance.

140. Formulate a system of grading consistent with school policy

141. Appraise students' products according to occupational performance standards.

142. Appraise students' performance in relation to student performance objectives.

143. Evaluate individualized assignments completed under directed study.

144. Devise self-evaluation techniques for use by students.

145. Arrange for students to evaluate their own progress.

146. Determine students' grades based on related instruction and laboratory or on-the-job experience.

147. Engage in cooperative evaluation of achievement with students.

148. Interpret student's evaluation of instruction.

149. Formulate essay test items.

150. Formulate true-false test items.

151. Formulate completion test items.

152. Formulate matching test items.

153. Formulate multiple-choice test items.

154. Devise laboratory performance tests.

155. Devise laboratory performance rating sheets.

156. Formulate test items for an oral test.

157. Administer teacher-made tests.

158. Devise case study problems.

159. Analyze test for validity.

160. Analyze tests for reliability.

161. Review student progress and/or achievement records to assess effectiveness of instruction.

162. Involve students in formulating the procedures for their participation in the evaluation of instruction.

163. Obtain information from fellow teachers and supervisory personnel regarding the quality of one's instruction.

164. Seek opportunities for self-evaluation of instruction.

V. Management

165. Compile a list of supplies needed for the academic year.

166. Identify new tools and/or equipment needed for the academic year.

167. Recommend reference books and periodicals related to vocational education that should be added to the library.

168. Prepare a capital outlay budget proposal for new equipment.

169. Plan an operating budget proposal for consumable supplies, services, and instructional materials.

170. Prepare a budget for estimating travel expenses incurred in vocational activities.

171. Arrange for additional vocational facilities to accommodate expanded enrollments and technological advancements.

172. Prepare purchase requests for approved vocational equipment and supplies.

173. Design a procedure for acquiring needed consumable supplies and materials.

174. Accept gifts or donations of supplies and equipment for the vocational education program in accordance with school policy.

175. Devise a system for determining and collecting student fees for consumable supplies.

176. Structure a filing system for records and report forms.

177. Supply the data for vocational reports required by the state department of education.

178. Devise a filing system for instructional materials.

179. Devise a system for maintaining occupational opportunity information for use by vocational students.

180. Record vocational student attendance according to school policy.

181. Record vocational student's grades according to school policy.

182. Assemble individual student files documenting personal characteristics, attitudes, and grades.

183. Provide approved safety apparel and devices for vocational students assigned to hazardous equipment.

184. Establish a procedure for attending to the first aid needs of a vocational student.

185. Maintain a record of safety instruction presented in compliance with safety laws and regulations.

186. Uphold school standards of expected student behavior.

187. Formulate with students acceptable standards of behavior in vocational classrooms and laboratories.

188. Uphold acceptable standards of student behavior in vocational classrooms and laboratories.

189. Carry out approved disciplinary action when warranted.

190. Encourage students to exercise self-discipline.

191. Control outbursts of fighting and aggressive behavior.

192. Maintain an inventory of vocational tools, supplies, and equipment.

193. Establish a system for repairing and servicing tools and equipment in the laboratory.

194. Arrange for the storage and security of supplies and equipment.

195. Implement student check-out procedures for tools, supplies, and equipment used in the laboratory.

196. Direct students in a system for cleaning and maintaining the laboratory.

197. Schedule laboratory equipment for maxium utilization by students.

198. Arrange layout of the vocational laboratory to simulate the occupational enviroment.

199. Arrange laboratory work areas and storage space to facilitate student work performance.

200. Control heat, light, and ventilation in vocational laboratories and classrooms.

201. Establish a policy for use of the physical facilities and equipment by other school personnel and outside groups.

VI. Guidance

202. Determine students' background and enviroment.

203. Administer subject-matter diagnostic tests.

204. Analyze student's cumulative records.

205. Maintain ancedotal records.

206. Determine relationships among students through the sociogram or toher sociometric techniques.

207. Review students' autobiographies for information to aid in understanding the students.

208. Assemble information for case study reports.

209. Communicate with prospective and continuing students during the summer.

210. Maintain an open door policy for student consultation.

211. Encourage students to discuss career aspirations.

212. Demonstrate a regard for and an interest in students as individuals.

213. Develop constructive working relationships among students.

214. Demonstrate personal concern for the student and his family.

215. Conduct home visits.

216. Recognize potential problems of students.

217. Conduct a conference with a student.

218. Conduct group conferences.

219. Confer with the student and his parents regarding his educational development.

220. Interpret occupational tests and inventories to students.

221. Assist students in developing good study habits.

222. Establish communication patterns for exchanging information and for cooperating with the guidance staff.

223. Supply guidance staff with performance data about students.

224. Refer students to guidance staff and other specialists.

225. Assist students with their problems by working cooperatively with outside agencies such as health and welfare services.

226. Work with other teacher to help students with individual concerns.

227. Refer students to qualified resource persons for occupational and educational information.

228. Arrange with professional staff for administration and interpretation of personality, aptitude, and intelligence tests for specific students.

229. Arrange for the local office of the U.S. Employment Service to administer and interpret the General Aptitude Test Battery.

230. Present information to students on occupational opportunities.

231. Present information to students on advanced training and education at opportunities available to them.

232. Assist students in determining ways to best describe their salable skills.

233. Write letters of recommendation for students.

234. Assist graduating students in preparing for interviews with potential employers.

235. Assist students in securing and completing applications for jobs, scholarships, educational loans, or college admission.

VII. School- Community Relations

236. Assist in the development of policies regarding school-community relations.

237. Plan the school-community relations activities for the vocational education program.

238. Procure clearance from the school administration to conduct school-community relations activities related to the vocational education program.

239. Express a philosphy consistent with that of the vocational faculty.

240. Speak to school and community groups about the vocational education program.

241. Provide brochures to inform the school and community about the vocation program.

242. Provide displays in the school and community about the vocational education program.

243. Prepare news releases and manuscripts on activities of the vocational education program for newspapers and other periodicals.

244. Present activities of the vocational education program on television.

245. Present activities of the vocational education program on radio.

246. Direct student presentations describing activities of the vocational education program.

247. Conduct an open house to familiarize members of the school and community with activities of the vocational education program.

248. Sponsor student-parent activities for the vocational education program.

249. Assist with special community social events.

250. Assist with community business and industry sponsored activities.

251. Serve in professional nonvocational organizations to improve the image of the vocational education program.

252. Serve in a community civic, service, or social organization to improve the image of the vocational education program.

253. Provide consultant services to local business and industry.

254. Maintain liaison with union officials and employers.

255. Maintain liaison with employment agencies.

256. Maintain liaison with community professional, service, fraternal, social, and religious organizations.

257. Maintain good relations with other schools.

258. Maintain liaison with state department personnel.

259. Obtain informal feedback on the vocational education program through contacts with individuals in the school and community.

260. Conduct opinion surveys in the school and community concerning the vocational education program.

261. Analyze enrollment trends to determine student and parent acceptance of the vocational education program.

262. Obtain information from parents relative to their expectations of the vocational education program.

263. Consult the advisory committee to obtain information concerning their expectations of the vocational education program.

264. Acquire information from members of the community power structure (e.g., political, social, and economic pressure groups) regarding their expectations of the vocational education program.

265. Study community voting results on financial issues affecting the vocational education program to determine community support.

266. Study in-school election results (student council, class officers) to determine the image of the vocational students in the school.

267. Maintain working relationships with the school administration and faculty.

268. Assist in planning the goals of the total school program.

269. Maintain working relationships with the school supporting staff through cooperation and mutual effort.

VIIII. Student Vocational Organization

270. Obtain approval from the school administration for establishing the student vocational organization.

271. Contact state department personnel regarding the steps to be followed in organizing a student vocational organization.

272. Acquaint prospective members and their parents with the purposes, activities, and values of the student vocational organization.

273. Organize a student committee to assess student interest in joining a student vocational organization.

274. Assist in the development of a constitution a bylaws for the student vocational organization.

275. Conduct an organizational meeting for a student vocational organization.

276. Direct initiation activities of the student vocational organization.

277. Orient students to the student vocational organization.

278. Assist in the election and installation of officers of the student vocational organization.

279. Conduct a leadership training session for the officers of the student vocational organization.

280. Obtain the assistance of state department personnel in maintenance of the student vocational organization.

281. Assist students in developing a yearly program of work for the student vocational organization.

282. Assist students in advancing within the available degrees in the student vocational organization.

283. Supervise social and educational activities of the student vocational organization.

284. Involve elected chapter parents in the activities of the student vocational organization.

285. Assist students with publicizing the student vocational organizational activities.

286. Assist students with the financial management of the student vocational organization.

287. Assist in planning and organizing fund-raising activities for the student vocational organization.

288. Maintain a file of publications available for the student vocational organization.

289. Supervise the development of an annual handbook for the student vocational organization.

290. Supervise the development of a chapter scrapbook for the student vocational organization.

291. Evaluate the student vocational organization.

292. Affiliate the student vocational organization with the state and national vocational organizations.

293. Assist in the preparation of state and national reports for the student vocational organization.

294. Provide advice for student entries in state and national student vocational organization contests.

295. Send student representatives to district, state, regional, and national student vocational organization activities.

296. Assist in the development of rules and procedures for conducting district, state, regional, and national student vocational organization contests.

297. Serve as an advisor or judge for district, state, regional, or national student vocational organization contests.

298. Participate in district, state, regional, and national activities of the student vocational organization.

IX. Professional Role and Development

299. Identify current trends of the teaching profession.

300. Promote the attainment of the goals of the teaching profession.

301. Express a personal professional philosphy consistent with the goals of the teaching profession.

302. Express a personal professional philosphy consistent with the goals of the vocational education.

303. Maintain the ethical standards expected of a professional educator.

304. Exchange observational visits, innovations, and ideas with others in the profession.

305. Support professional organizations through membership and attendance at meetings.

306. Serve professional organizations as an officer and/or chairman or member of the committee.

307. Represent the teaching profession as a committee member, delegate, or program participant at meetings and activities of other related professions.

308. Participate in experimental and other data collecting research activities.

309. Write an article or book for publication which contributes to the literature of the profession,

310. Assist in orienting teachers who are new to the school system.

311. Work with a team from the school and/or community on pertinent school activities.

312. Serve community needs by contributing professional expertise to community activities.

313. Consult supervisory and administrative evaluations to determine attitudes of others toward one's personal and professional abilities and limitations.

314. Use a self-analysis form to evaluate personal and prefessional abilities and limitations.

315. Select the teaching position which is in keeping with personal and professional abilities and limitations.

316. Maintain professional certification through enrolling ingraduate, extension, and in-service education programs.

317. Expand educational background and leadership potential by achieving advanced degrees.

318. Keep up-to-date through reading professional literature.

319. Acquire new occupational skills and information needed to keep pace with technological advancement in vocational education.

320. Up-date professional personnel file regularly.

321. Participate in non-instructional school activities (cafeteria supervision, homeroom, bus duty, chaperoning, etc.)

322. Assist with nonvocational student organization activities.

323. Provide opportunities for potential teachers to observe and participate in the public school program.

324. Interpret the policies and regulations of the local school district to the student teacher.

325. Plan activities for the student teacher which draw upon and enrich college course work.

326. Assign responsibilities commensurate with the student teacher's background of knowledge and experience.

327. Demonstrate instructional techniques for student teachers.

328. Consult regularly with the student teacher regarding planning, implementing, and evaluating teaching.

329. Confer regularly with the student teacher.

330. Confer with the college supervisor and the student teacher regarding plans for and evaluation of the total student teaching experience.

X. Coordination

331. Establish criteria for selection of student-learners.

332. Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.

333. Administer occupational tests relative to student-learner selection and placement.

334. Gather student-learner selection data.

335. Interview students and parents to obtain student-learner interest and aptitude information.

336. Identify a prospective student-learner on the basis of selection criteria and data.

337. Match a student-learner's unique charateristics with an appropriate training station.

338. Neogotiate on-the-job training hours and wages for student-learners.

339. Establish criteria for evaluating the training station potential of a business or industry.

340. Identify prospective cooperating employers to provide on-the-job training stations.

341. Establish criteria to evaluate qualifications of prospective on-the-job instructors.

342. Assess training capability of the on-the-job instructor of the prospective training station.

343. Assess educational adequacy of the prospective training station's facilities and equipment.

344. Assess safety provisions of the facilities and equipment of the prospective training station.

345. Convince an employer to provide a training station for cooperative vocational education.

346. Arrange with a union to make a contract provisions for student-learners.

347. Develop a training agreement between student-learner, parent, school, and cooperating employer.

348. Arrange school and work schedules with student-learners and school and employing personnel.

349. Develop a systematic training plan with the cooperating employer and/or on-the-job instructor.

350. Aid student-learners in procuring work permits.

351. Assist the cooperating employer in obtaining information concerning federal and state way and hour classifications.

352. Assist the cooperating employer in acquiring a federal permit to pay a training wage.

353. Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation.

354. Establish the cooperating employer's qualifications for reimbursement for training a student-learner.

355. Obtain reimbursement for the cooperating employer providing on-the-job training.

356. Obtain reimbursement for the student-learner for allowable training costs such as clothing and tools.

357. Prepare the student-learner for an interview with the cooperating employer and training station personnel.

358. Assist the student-learner in on-the-job training orientation.

359. Assist the cooperating employer's personnel in accepting the training status and role of the student-learner.

360. Maintain good working relationships with training station personnel.

361. Develop a procedure to insure student's safety and protection in the training station.

362. Develop a plan for supervision of on-the-job training.

363. Inform the administration of the coordination itinerary.

364. Assess the on-the-job experience daily reports with the student-learner to plan future instruction.

365. Encourage the on-the-job instructor to follow the training plan in providing experiences for the student-learner.

366. Maintain the student-learner's progress reports for on-the-job training and related instruction.

367. Examine the student-learner's progress reports to determine future-on-the job training experiences and related instruction.

368. Maintain a record of individual work hours, wages, and work experiences of on-the-job training.

369. Assist the student-learner in the solution of problems related to on-the-job training.

370. Control student-learner absenteeism from school and on-the-job training.

371. Control the transfer of student-learners within the cooperative vocational education program and to other school programs.

372. Conduct termination procedures for on-the-job training for the student-learner when conditions demand it.

373. Sponsor an employer-employee appreciation event.

374. Evaluate the student-learner's work qualities and habits on the job.

375. Evaluate the student-learner's personal traits and characteristics on the job.

376. Check the student-learner's progress with the on-the-job instructor and other training station personnel.

377. Check the student-learner's progress in acquiring skills on the job.

378. Assess the student-learner's performance with the assistance of the on-the-job instructor.

379. Obtain suggestions from the on-the-job instructor to guide the selection of lessons for related instruction.

380. Evaluate the quality of the on-the-job training received by the student-learner.

381. Provide a workshop to assist on-the-job instructors in techniques for teaching student-learners.

382. Assist the on-the-job instructor with development of teaching techniques during supervisory visits to the training station.

383. Update related instruction for student-learners on the basis of information on technology obtained from cooperating employers.

384. Obtain information from the advisory committee on ways to improve related instruction and on-the-job training.

MODULE TITLES FOR INSTRUCTION-EXECUTION CATEGORY

Module: Direct students in obtaining information from sources in the community

79. Conduct field trips.

80. Direct students in gathering information from sources in the community.

Module: Present information with the assistance of a resource person.

118. Present information with the assistance of a resource person.

130. Present information with a tele-lecture.

Module: Conduct symposiums, panels, and group discussions.

81. Conduct symposiums.

95. Lead group discussions.

96. Conduct panel discussions.

Module: Stimulate learning through brainstorming, buzz group and question box techniques.

82. Conduct brainstorming sessions.

97. Conduct buzz groups.

98. Employ question box technique.

Module: Direct students in instructing other students.

83. Direct student presentations.

84. Direct students in instructing other students.

Note: The above is a portion the the conceptual framework for the category.

SAMPLE OF A CATEGORY FRAMEWORK

EXAMPLE OF PERFORMANCE OBJECTIVES DEVELOPED FROM GENERAL OBJECTIVE CRITERIA

General Objective: Assist graduating students in preparing for interviews with potential employers (No. 234).

The following performance objectives were developed from the general objective by establishing one performance objective for each of the criteria listed.

1. Given the case studies of five employers and the case study of a graduating student you will evaluate and select two employers with whom the student should obtain an interview. Your selections will be evaluated according to the key included in this module.

2. Given two graduating students seeking employment, you will assist them in setting up interviews with employers through the use of two different techniques. Your assistance will be evaluated by a list of criteria available from your resource person.

3. Given a student who has set up a job interview with an employer, you will assist him in practicing for the interview using simulation techniques. Your assistance will be evaluated by a list of criteria available from your resource person.

APPENDIX B

Competency Lists - Part 2: For Initial Teacher Preparation in Both Broad-Based Vocational Education and Specific Service Areas

Fourteen Lists From National Studies

American Home Economics Association......page 160
Bensen and others.......................page 163
Byrd....................................page 165
Canfield................................page 167
Courtney and Halfin.....................page 169
Crawford................................page 170
Harris..................................page 172
Huffstutler.............................page 176
Moore and Bender........................page 181
Ohio State University...................page 186
Perkins.................................page 189
Richey..................................page 194
Spaziani and Courtney...................page 196
Vogler and Patton.......................page 198

American Home Economics Association. Competency-Based Professional Education in Home Economics, Selected Competencies and Criteria.

Ames, Iowa, February 1974.

PRE-PROFESSIONAL LEVEL

EDUCATION PHILOSOPHY

1. The participant will formulate and communicate internally consistent and professional beliefs based on philosophies of home economics and of education in the context of contemporary society.
2. The participant will relate professional beliefs to decision making in varied educational settings.

PROFESSIONAL ROLE IN HOME ECONOMICS

3. The participant will demonstrate ability to fulfill the professional role of the home economics educator as a facilitator of learning, counselor, team member, communicator and interpreter, a liaison with community, and a member of the profession.
4. The participant will demonstrate a commitment to the professions of home economics and education.
5. The participant will assume responsibility for her/his own continuous personal and professional growth.
6. The participant will demonstrate ethical personal and professional behavior.
7. The participant will analyze and evaluate social action that influences the well-being of individuals, families, and the community.

PROGRAM PLANNING FOR EDUCATION IN HOME ECONOMICS

8. The participant will collect and analyze relevant information that has applications for a given home economics program.
9. The participant will select and justify the objectives, content and strategies included in a given home economics program.
10. The participant will organize home economics offerings into a sequential and integrated pattern to meet the needs of given audiences.
11. The participant will implement a plan for a given home economics program.
12. The participant will evaluate objectives and goals of groups in relation to a total home economics program.

THE EDUCATIVE PROCESS IN HOME ECONOMICS

13. The participant will use skills in an educative setting to facilitate learning.
14. The participant will design instructional plans appropriate to the needs of specific learners in educative settings.
15. The participant will implement instructional plans.
16. The participant will plan for and use evaluation as an integral part of the teaching-learning process.

17. The participant will establish and maintain an environment that facilitates achievement of objectives.

RESEARCH IN HOME ECONOMICS AND EDUCATION

18. The participant will recognize and appreciate the role of research in facilitating the teaching/learning process and in expanding knowledge.
19. The participant will use research findings to improve the teaching/learning process and as a source of knowledge.
20. The participant will comprehend the elements of the research process.

PROFESSIONAL IMPROVEMENT LEVEL (PROFESSIONAL DEVELOPMENT)

EDUCATION PHILOSOPHY

21. The participant can evaluate professional philosophies.
22. The participant will continually develop a personal/professional philosophy.
23. The participant can contribute to development of a philosophy for the home economics profession.

PROFESSIONAL ROLE IN HOME ECONOMICS

24. The participant can accept, perform, and adapt to changing roles and functions of various positions as a home economics educator.
25. The participant can evaluate educational structure in relation to its promotion of the purposes of educational programs in home economics.
26. The participant can evaluate professional performance in home economics.
27. The participant will show integrity in relation to professional practice.

PROGRAM PLANNING FOR EDUCATION IN HOME ECONOMICS

28. The participant will analyze the sociological, economic, political, cultural, and educational forces that affect home economic programs.
29. The participant can evaluate the needs of learners in a given environment in relation to program needs.
30. The participant will integrate the contributions of fields of study related to home economics in effective program planning.
31. The participant will develop a system for selecting and organizing home economics knowledge and skills significant for various learners and learner levels.
32. The participant will use and initiate research for program planning.
33. The participant will evaluate existing programs and retain, modify, or delete them or initiate appropriate new home economics programs.
34. The participant will assume leadership in coordinating and/or integrating home economics programs with other programs, agencies and organizations.
35. The participant will realistically evaluate, obtain, and allocate human, fiscal, and material resources for home economics programs.
36. The participant will formulate flexible long range plans for programs and facilities.
37. The participant will engage in self-appraisal of personal and professional growth as related to the ability to plan programs.
38. The participant will supervise others engaged in program planning.

THE EDUCATIVE PROCESS IN HOME ECONOMICS

39. The participant will contribute to the development of theories, hypotheses, and procedures in the educative process in home economics educational programs.
40. The participant will develop and refine instructional strategies.
41. The participant will predict the direction of behavior change that results from the use of instructional strategies.
42. The participant will develop and refine instructional materials.
43. The participant will create a learning environment to optimize the various types of interactions within the educative process.
44. The participant will evaluate the educative process.
45. The participant will systematize the assessment of learners' progress toward the achievement of objectives.

RESEARCH IN HOME ECONOMICS AND EDUCATION

46. The participant values the importance of the relationship between teaching and research.
47. The participant can conduct research that relates to the teaching/learning of home economics.
48. The participant can interpret data to others.
49. The participant can use research data.
50. The participant can evaluate research data.
51. The participant can disseminate research data.
52. The participant can promote a climate in which research ideas are stimulated and nurtured including those between and among other disciplines.

Bensen, M. James; and others. The Industrial Education Teacher's Professional Tasks. ED 099665, CE 002772.

Department of Industrial Teacher Education, University of Wisconsin, Menomonie
July 1974.

IMPROVE INDIVIDUALS' COMPETENCIES

1. Provide for regeneration and development of competencies.
2. Keep up with developments in the field.
3. Use self-evaluation techniques.

DESIGN PROGRAMS

4. Study society in general and its problems in particular to maintain and improve the relevance of industrial education goals to society.
5. Study technology and the institution of industry within our society as a source of the body of knowledge for industrial education.
6. Study group cultures and principles of learning in order to relate instruction to the individuals for whom the program and instruction is being planned.
7. Analyze the study of society, industry, and the individual to identify the problems and human needs toward which industrial education can make contributions.
8. Develop new and existing programs in terms of expected task outcomes.
9. Collect tasks into appropriate instructional groups for teaching (courses, units, etc.).
10. Develop a plan for continual revision and improvement of programs.
11. Develop implementation strategies for new programs and changes in existing programs.

DESIGN INSTRUCTION

12. Write performance objectives for each course.
13. Organize objectives into appropriate sequences.
14. Validate content against domains and against levels within domains.
15. Develop (or identify) students learning activities appropriate to each behavioral objective (make the content operational).
16. Select teaching activities and strategies.
17. Identify and prepare instructional resources.
18. Develop a strategy for evaluating instruction.
19. Organize and complete the course of study.
20. Prepare lesson plans for group and individualized instruction.

NURTURE HUMANENESS

21. Nurture humaneness with students.
22. Nurture humaneness with the school staff.
23. Nurture humaneness with parents and community.
24. Nurture humaneness to one's self.

FACILITATE LEARNING

25. Execute instructional plans and strategies.
26. Motivate students.
27. Interact with students in a positive manner.
28. Adjust the plans and strategies based on observed feedback from students.
29. Teach the substantive content of the field.

MANAGE THE LEARNING ENVIRONMENT

30. Plan for and organize the facilities needed for the program.
31. Requisition and receive supplies and materials.
32. Maintain records and filing systems.
33. Respond to social-emotional climate
34. Establish physical conditions conducive to learning.

PROVIDE PROFESSIONAL SERVICE

35. Advise and counsel students.
36. Participate in service activities of the educational and civic community.
37. Assist in general school duties.
38. Offer professional advice.
39. Develop programs of professional service.
40. Contribute to literature of the field through technical and/or professional writing.
41. Supervise student-teachers.

UTILIZE RESEARCH

42. Identify needs (problems) amenable to research.
43. Prepare proposals for researching a problem.
44. Conduct proposed research.
45. Write research reports.
46. Cooperate in research efforts of others.
47. Read and interpret research findings both as a consumer and as a researcher.
48. Apply the decision-making process to the solution of instructional problems.

EVALUATE INSTRUCTION

49. Assess whether students have assimilated the material presented.
50. Construct and evaluate measuring instruments and procedures.
51. Administer evaluative experiences.
52. Determine efficiency and effectiveness of instruction.

EVALUATE PROGRAMS

53. Collect information at the program level.
54. Assess factors influencing program.
55. Determine output characteristics of students
56. Determine effectiveness of program implementation.

Byrd, Flossie M. The Role of Teacher Education Institutions, Selection of Teachers Basic Competencies Needed. VT 000204.

Ohio State University, Columbus, Ohio, March 1966.

BEGINNING HOME ECONOMICS TEACHERS:

1. Integrates philosophy of life, philosophy of education, philosophy of vocational education, and philosophy of home economics as a basis for thought and action.
2. Identifies and accepts the professional role of the home economics teachers.
3. Establishes and maintains mutually satisfying or acceptable interpersonal relationships in the professional environment.
4. Plans and implements effectively the part of the home economics program for which she is responsible.
5. Teaches effectively.
6. Uses and participates in research.
7. Participates as a home economics teacher-citizen in local and expanded community efforts which have significance for individual and family well-being.

TEACHERS IN EMERGING PROGRAMS

8. Utilization of the most up-to-date techniques required to do the job.
9. Possession of a thorough foundation in the knowledge and skills involved in the job.
10. Effective working with trainees in the development of skills and attitudes.
11. Cooperation with the administration, employment agencies, and potential employers in the development of the course.

TECHNICAL COMPETENCIES WHICH SEEM REASONABLE TO EXPECT OF THE OCCUPATIONAL TEACHER:

12. Integrates philosophy of education, philosophy of life, and philosophy of occupational education as a basis for thought and action. (revised from other source)
13. Possesses up-to-date knowledge regarding technical matters related to the practices of a specific occupation or cluster of occupations.
14. Visualizes the relationship between the cognitive and manipulative elements of specific occupations or clusters of occupations and bridges the hiatus.
15. Possesses basic skills required to perform effectively in the occupations.
16. Structures the teaching-learning situation in a manner as to enhance the acquisition of cognitive and manipulative elements of the occupation.
17. Advises and stimulates students to develop to their fullest capacity.
18. Communicates with and relates to people -- students, vocational leaders, industry representatives and others -- whose cooperation and assistance facilitate program planning and implementation.
19. Builds a close liaison between industry and other potential employees and the individuals who ultimately will assume some responsibility for fulfilling their personnel needs.

20. Demonstrates an understanding of the concept of culture as "an attitude" rather than an attribute of a specific vocation.

PERSONAL COMPETENCIES: TEACHERS IN OCCUPATIONAL EDUCATION

21. Exemplifies a quality of feeling about her work -- a commitment to her role and the objectives of the program -- personal involvement.
22. Recognizes the dignity of work -- any work which prepares for salable skills at the secondary, post high school or adult level.
23. Transmits respect for the dignity of work to students.
24. Possesses the capacity for empathy and openmindedness.
25. Possesses a passion for ordering, knowing and creating reality for oneself and the individuals being taught.
26. Maintains psychic resiliency.

Canfield, Albert A. Competencies for Allied Health Instructors, VTO 19639, ED 074258.

Florida University, Gainesville, Florida, December 1972.

INSTRUCTION

1. Maximize the learning climate utilizing objectives, process, evaluation, and feedback.
2. Utilize the most effective instructional materials and techniques to achieve the learning objectives.
3. Operate the equipment needed to produce and present those instructional materials.
4. Prepare appropriately reliable and valid instruments of evaluation which reflect the specified objectives.
5. Develop and maintain effective and productive relationships with students.
6. Create learning experiences that improve skills and influence attitudes, as well as increase knowledge.

CURRICULUM DEVELOPMENT AND PLANNING

7. Understand the role and contribution of differing educational experiences, including the classroom, the laboratory, independent study, clinic, and field.
8. Develop curricula in terms of job requirements for knowledge, skill, and attitudes utilizing task analysis and literature search techniques.
9. Organize cirrucular experiences into sequential structures which would minimize over-lap and assure logical and meaningful progressions in achievement.
10. Utilize the special abilities of persons in specifically related discipline areas in developing the most meaningful organization and content of learning experiences.
11. Work effectively within the institution's policies and procedures for program and course development and revision.
12. Identify local, state, and national sources from which information may be obtained about new developments, equipment, techniques, and theories in the student's field.
13. Understand the laws and regulations relating to education, including certification, accreditation, and licensure.
14. Understand the current role and future implications of equivalency examinations.

EDUCATION (general)

15. Explain the objectives of the various types of educational institutions with whom contact will be necessary.
16. Utilize knowledge of common or typical measures of intelligence, interest, and personality in student selection, advisement, counseling, and career guidance activities.
17. Understand the responsibilities and duties of a faculty member in his institution and community.

18. Explain the roles, duties, and functions of group characteristic of the type of institution in which employment is anticipated including governing boards, chief administration officers, major departmental or division heads, faculty and students.
19. Describe the characteristics of students entering programs within institutions in which employment is anticipated.
20. Describe basic educational funding and budgeting processes.
21. Describe conditions of employment in educational institutions, such as tenure, salaries and fringe benefits.

Courtney, E. Wayne; Halfin, Harold H. Competencies of Vocational Teachers. A Factor Analysis of the Training Needs of Teachers of Occupational Education.

Department of Statistics, Oregon State University, Corvallis, Oregon, August 1969.

The vocational education teacher will:

1. Use the existing local school administration system to initiate and maintain the vocational program.
2. Relate technological advances to laboratory instruction.
3. Select appropriate visual materials for instructional purposes.
4. Conduct periodic up-dating of the course of study in accord with recent occupational trends.
5. Select instructional materials for the classroom.
6. Maintain discipline in the shop or laboratory.
7. Understand the role of the school in providing vocational preparation for the student.
8. Motivate the student in the classroom.
9. Make use of the innovative provisions of the Vocational Act of 1963.
10. Utilize your background in general or liberal studies to advantage while participating in community activities.
11. Understand state certification requirements.
12. Understand the legal provisions of teacher liability.
13. Interpret the results of vocational interest inventories.
14. Interpret statements of ethics as set forth by your professional organizations.
15. Use questions during the classroom presentations to aid student learning.
16. Use questions during demonstrations to aid student learning.
17. Provide appropriate practice for classroom learning experience.
18. Understand the goals of vocational education.
19. Understand the goals of general education.
20. Understand the role of the school in providing vocational preparation for the students.
21. Use sociograms.
22. Secure appropriate on-the-job training positions for students.
23. Use formalized criteria in the selection of textbooks.
24. Aid in the development of the total school program.
25. Aid the student in obtaining work placement after training.
26. Locate available standardized tests.
27. Develop objective tests to measure achievement.
28. Understand the history of vocational education.
29. Purchase appropriate equipment and supplies for instructional purposes.
30. Obtain the cooperation of available communications media personnel.
31. Make a shop or laboratory demonstration meaningful to the individual student.

Crawford, Lucy. A Distributive Teacher Education Curriculum Theory Design. ED 061442, VTO 14976.

Division of Vocational-Technical Education, Virginia Polytechnic Institute and State University, Blackburg, Virginia, 1971.

ORGANIZATION AND ADMINISTRATION OF DISTRIBUTIVE EDUCATION

The distributive education teacher-coordinator will:

1. Comprehend the meaning of terms unique to the distributive education program.
2. Explain the aims and objectives of the distributive education program.
3. Describe the curriculums for high school, post-secondary, and adult programs.
4. Formulate a concept of the total job of the distributive education teacher-coordinator.
5. Demonstrate the ability to evaluate his personal qualities in relation to those deemed necessary for the distributive education teacher-coordinator.
6. Plan a distributive education program to accomplish stated objectives.
7. Conduct a community survey.
8. Apply the principles of practical research in conducting a shopping or service survey.
9. Describe a plan for working with an advisory committee.
10. Demonstrate the ability to develop policies to serve as flexible guidelines in the selection of distributive education students for both the cooperative and the project of the program.
11. Demonstrate the ability to make effective observation visits.
12. Demonstrate the ability to design on-the-job learning experiences.
13. Demonstrate the ability to communicate with various publics about the distributive education program.
14. Comprehend the pattern for the administration of vocational education and distributive education.
15. Perceive the role in the adult distributive education program.
16. Become familiar with local budgeting problems in distributive education.
17. Prepare a plan for securing and filing appropriate educational materials.
18. Demonstrate the ability to serve as advisor to the distributive education club.
19. Evaluate the effectiveness of the local distributive education program.

ADMINISTERING THE DISTRIBUTIVE EDUCATION ADULT PROGRAM

The distributive education teacher-coordinator will:

20. Describe the goals of the adult program.
21. Identify responsibility of the distributive education teacher-coordinator in the development of the adult program in budget planning, securing and training part-time adult instructors, evaluating an adult program and record keeping for the adult program.

22. Identify responsibilities of the distributive education teacher-coordinator in the development of the adult program in budget planning, securing and training part-time adult instructors, evaluating an adult program and record keeping for the adult program.
23. Identify specific procedures to follow at the opening and closing sessions of an adult class.
24. Describe the adult curriculum.
25. Prepare a schedule of classes for an adult program.
26. Explain methods for securing and maintaining enrollment in the adult classes.
27. Identify the methods of evaluation of the adult program.

COORDINATION OF VOCATIONAL COOPERATIVE PROGRAMS

28. The teacher-coordinator will have the ability to select and maintain training stations that provide the best possible training for individual students depending on their needs and vocational goals.
29. The teacher-coordinator will understand the importance of having a training sponsor appointed by the employer for each cooperative student.
30. The teacher-coordinator will have the ability to formulate a concept of the role of coordination in the education of a student.
31. The teacher-coordinator will have the ability to analyze philosophical concepts regarding coordination.
32. The teacher-coordinator will have the ability to design on-the-job learning experiences for cooperative students.
33. The teacher-coordinator will have the ability to design participating experiences and/or projects for students who are not in the cooperative program.
34. The teacher-coordinator will have the ability to formulate a concept in regard to relating classroom instruction to actual on-the-job situations.
35. The teacher-coordinator will be able to conceive of his role as a specialist in a particular vocational area.
36. The teacher-coordinator will have the ability to apply principles involved in disseminating information to students and parents regarding vocational education.
37. The teacher-coordinator will have the ability to develop policies to serve as flexible guidelines in the selection of students for both the cooperative and the project plans of the program.
38. The teacher-coordinator will have the ability to assist the student -- according to his vocational interest, aptitude and ability -- in selecting the most appropriate on-the-job training placement.

Harris, E. Edward. Office Education and Distributive Education Teacher-Coordinators Critical Requirements and Reasoned-Judgement Comparisons. VT 002898

June 1965.

DISCIPLINE AND CONTROL OF STUDENTS

1. Recommends to the administration that students who violate or continue to violate cooperative program rules and regulations be dropped from the course.
2. Secures the cooperation of training station personnel in helping students to improve their attitude, attendance, and performance in school.
3. Counsels with students, or secures cooperation of other class members, to help make them aware of their problems and how they can solve them.
4. Secures cooperation of guidance department or administrative staff members in dealing with student behavior problems.
5. Assesses a heavy grading penalty or detention for assignments that are late, improperly prepared, or not completed.

SELECTION OF TRAINING STATIONS AND PLACEMENT ACTIVITIES

6. Secures the cooperation of understanding employers and training sponsors to give students with known limitations effective training.
7. Places the students in a second training station when convinced that the reason for dismissal was not completely the student's fault.
8. Secures new training stations for students who had not previously received adequate instruction in a satisfactory working atmosphere.
9. Secures new training stations for students who are not making the progress that they are capable of when he feels the students would profit by a different training station.

EVALUATION AND SELECTION OF STUDENTS

10. Accepts students into the program who have known limitations after consulting with the students to determine if the deficiency is one that can be compensated by other factors.
11. Utilizes the services of the professional staff members of the school to aid him in his understanding of student applicants for the cooperative program.

PERSONAL AND PROFESSIONAL RELATIONSHIPS

12. Properly submits constructive proposals to improve the program.
13. Discusses student problems with appropriate administrative and professional staff members.
14. Utilizes conferences, rating sheets, and other devices to keep staff members informed about the program.
15. Informs students and employers of the necessity of following school regulations.
16. Handles each student problem individually with the major objective in mind of doing what is best for the student.
17. Consults with parents and provides them with the information that is advisable for them to have as cooperating parents.

18. Cooperates with employers and training sponsors in solving personnel problems.
19. Secures the cooperation of employers in helping students to gain adequate training when previous incidents deterred the process.
20. Promptly informs employers and training sponsors of conditions that might make a difference in what they might expect of the cooperative trainee.
21. Works effectively with various individuals and groups in the community.

ADJUSTING STUDENT TRAINING STATION PERFORMANCE PROBLEMS (employer suggested)

22. Explains to employers the possible reasons for the students' behaviors to aid them in making fair decisions.
23. Holds conferences with training station personnel and students to assist trainees in becoming better employees.
24. Holds conferences with students who need improvement and provides them with positive suggestions for improving.
25. Secures the cooperation of training station personnel to help students develop better employee-employer relations.
26. Removes students from training stations and recommends that they be dropped from the cooperative program for dishonesty when warranted.
27. Works cooperatively with training station personnel to gain a better understanding of dishonest acts performed or to give them an understanding of why students may have performed said dishonest act.
28. Holds conferences with employers prior to time students are actually discharged.
29. Holds conferences with students who are suspected of performing dishonest acts on the job.
30. Holds conferences with students, employers, and other employer representatives involved to clarify and solve problems.
31. Provides students who are having difficulty with guidance and constructive suggestions for improvement.
32. Encourages employers to give students an opportunity to prove themselves.

ADJUSTING STUDENTS' PROBLEMS (student suggestions)

33. Utilizes the training sponsors and student leadership activities to help individuals gain confidence in themselves.
34. Conducts conferences with students who are having difficulty in adjusting to the responsibilities of being cooperative trainees.
35. Removes students from present training station when he is convinced that it would be most beneficial to the students.
36. Discusses student training station problems with training station personnel.
37. Holds conferences with training station personnel and student-learners.
38. Requires, advises, or encourages students to remain at training stations for a longer period of time before making a final decision as to whether or not they like their position.

DIRECTION OF IN-SCHOOL LEARNING ACTIVITIES

39. Effectively utilizes the resources of local business establishments to supplement the instruction facilities of the school.
40. Secures guest speakers for his classes who are considered competent in the area being studied.

DEVELOPMENT AND PROMOTION OF PROGRAM

41. Effectively utilizes a variety of techniques, such as guest speakers during "-Careers in Retailing Week", speeches in other classes, personal conferences, dress-up days, special programs, mass media publicity, and window displays to inform students, teachers, and administrators about the program.
42. Effectively utilizes a variety of techniques, such as employer-employee banquets, individual and program recognition publicity, and various other mass media available to him to develop a good program image.

SELECTION OF TRAINING STATIONS AND PLACEMENT ACTIVITIES

43. Does not utilize places of employment where students have little opportunity to receive effective training.
44. Places students at a second training station when he is convinced that the reason for dismissal was not completely the fault of the student.
45. Secures new training stations for students who had not previously received adequate instruction in a satisfactory working atmosphere.

PERSONAL AND PROFESSIONAL RELATIONSHIPS

46. Works cooperatively with administrators on the operation of the cooperative program.
47. Works cooperatively with other members of the business education department.
48. Is aware of student's problems and offers personal assistance.

ADJUSTING STUDENT TRAINING STATION PERFORMANCE PROBLEMS (employer suggested)

49. Holds conferences with students who need improvement and provides them with positive suggestions for improvement.
50. Holds conferences with training sponsors to determine specifically the deficiencies of students.
51. Discusses on-the-job difficiencies with each student individually and offers suggestions for improvement.
52. Works with students individually in school to help them correct on-the-job deficiencies.
53. Provides training sponsors with constructive information to help them be more effective as on-the-job trainers.

ADJUSTING STUDENT PROBLEMS (student suggested)

54. Counsels with students to determine the nature and extent of their problems before determining the best way of helping them.
55. Listens to students and calms them down before attempting to help them. Discusses student problems with employer or supervisor at the training station.

DEVELOPMENT AND PROMOTION OF PROGRAM.

56. Utilizes personal contacts, direct mailings, and other techniques to promote the cooperative program.

On the basis of the findings of the study and the opinion of the national leaders of distributive education in 1959, the following areas of instruction should be stressed in both pre-service and in-service training of Illinois office education and distributive education coordinators;

57. The importance of selecting students for the cooperative program who plan to pursue a career in the occupational area of their preparation as cooperative trainees.
58. The value, importance, role and means of effectively utilizing the advisory committee for the preparation of secondary school students for the changing world of work.
59. The role of the businessman as a member of the advisory committee or as an employer in the placement process.
60. The value and role of business experience in the preparation of secondary school students who plan careers in business.
61. The importance of utilizing designated training plans in effectuating the cooperative method of instruction.
62. The value and importance of teacher-coordinators renewing their business experience at regular intervals.

The following should be stressed in the pre-service and in-service training of distributive education teacher-coordinators in Illinois:

63. The type of jobs for which student-learners should be prepared.
64. The number of hours that student learners should be allowed to work per week.

The following areas of instruction should be stressed in the pre-service and in-service education of Illinois office education coordinators:

65. The value and role of business experience in the preparation of secondary school students who plan to pursue careers in business.
66. The importance of selecting students for the cooperative program who plan to pursue careers in the occupational area for which they will be receiving instruction.

Huffstutler, E. Vaughn; McCallon, Earl L. Study of Needs for Vocational-Technical Professional Personnel Development in Texas, Final Report. Texas Education Agency, Austin, Division of Occupational Research and Development, 1973. ED 087905. To determine to what extent presently offered University courses are related to these specific competency needs and to survey recent vocational/technical graduates.

INSTRUCTION - PLANNING

1. Make a job analysis for determination of instructional content in the course taught.
2. Sequence performance goals (objectives) for a course.
3. Identify the unit topics for a course.
4. Determine objectives for a unit.
5. Identify lesson topics for a unit.
6. Develop a course syllabus.
7. Develop a course of study.
8. Correlate unit content with on-the-job and/or laboratory experiences.
9. Determine group and individual learning experiences for the unit based on individual differences of students.
10. Select methods of evaluating students' performance throughout a unit.
11. Identify the specific objectives for a lesson.
12. Select teaching techniques for a lesson.
13. Prepare information sheets for student use.
14. Plan student learning experiences for a lesson.
15. Prepare a lesson plan.
16. Prepare job sheets for student use.
17. Prepare assignment sheets for student use.
18. Select methods of evaluating students' attainment of lesson objectives.
19. Obtain textbook, references, and other instructional material.
20. Develop original instructional materials such as individualized related assignment sheets, transparencies, and charts.
21. Select tools and equipment for a lesson.
22. Assemble consumable supplies for instructional purposes.

INSTRUCTION - EXECUTION

23. Conduct field trips.
24. Direct simulated activities.
25. Conduct group supervised study.
26. Direct students in applying problem-solving techniques.
27. Present information by the project or job method.
28. Direct student study of textbooks, bulletins, and pamphlets.
29. Direct student study of information and assignment sheets.
30. Direct students in preparing laboratory work or job plans.
31. Provide students with opportunities to apply new information while under supervision of instructor.
32. Introduce a lesson.
33. Obtain a summary for a lesson.
34. Employ oral questioning techniques.
35. Acknowledge student verbal and non-verbal cues or reactions.

36. Enrich instruction to challenge the abilities of the abler student.
37. Provide instruction so that students can progress at own rate of speed.
38. Establish frames of reference to enable the student to understand a situation from several points of view.
39. Present a concept or principle through a demonstration.
40. Give a lecture.
41. Give an illustrated talk.
42. Use analogies to present information.
43. Present information by the use of individualized instruction.
44. Give an assignment.
45. Present information with the assistance of a resource person.
46. Present information with exhibits.
47. Illustrate with models and real objects.
48. Present information with audio-visual aids.

INSTRUCTION - EVALUATION

49. Establish criteria for evaluating student performance.
50. Consider cumulative data on students' ability and achievement in evaluating performance.
51. Formulate a system of grading consistent with school policy.
52. Appraise students' products according to performance standards of the occupations.
53. Appraise students' performance in relation to instructional goals.
54. Evaluate individualized related assignments completed under directed study.
55. Evaluate student-learner's work qualities, personal traits, and progress on the job.
56. Devise self-evaluation techniques for use by students.
57. Engage in cooperative evaluation of student's achievement with student.
58. Determine grade for performance for on-the-job and related instruction.
59. Interpret students' evaluation of instruction.
60. Formulate items for objective tests.
61. Formulate completion test items.
62. Administer teacher-made tests.
63. Analyze tests for validity.
64. Analyze tests for reliability.

PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION

65. Collect occupational data from employers to identify vocational education needs.
66. Identify the role and function of the advisory committee.
67. Assist in the identification of the vocational education purposes and objectives for the school.
68. Identify the competencies needed for entry into an occupation.
69. Describe the occupational standards of performance for each task in an occupation.
70. Assist in writing general objectives for courses offered in the vocational education program.
71. Identify knowledge and attitudes required for the performance of each occupational task included in a course.

72. Write student performance goals for vocational education courses.
73. Consult advisory committee in developing a long-range program plan for vocational education.
74. Analyze long-range course needs for the vocational education program.
75. Specify long-range facility, equipment, and supply needs for the vocational education program.
76. Assist in preparing the long-range program plan for vocational education in the school.
77. Maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.
78. Determine the reasons students drop-out of the vocational program.
79. Assess the relevancy of the vocational course offerings.
80. Assess the adequacy of the vocational education facilities and equipment relative to technological changes.
81. Disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.

MANAGEMENT

82. Compile a list of supplies needed for the academic year.
83. Identify new tools and equipment needed in a vocational course for the academic year.
84. Recommend reference books and periodicals related to vocational education that should be added to the library.
85. Prepare a capital outlay budget proposal for new equipment needed in a vocational course.
86. Plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.
87. Prepare a budget for estimated travel expenses incurred in vocational activities.
88. Arrange for additional vocational facilities to accommodate expanded enrollments and technological advancements in a course.
89. Prepare purchase request for approved vocational equipment and supplies.
90. Supply administrators with data for vocational reports required by the state department of education.
91. Devise a system for maintaining occupational information and opportunity data for use by vocational students.
92. Devise a filing system for instructional materials.
93. Uphold school standards of expected student behavior.
94. Formulate with students acceptable standards of behavior in vocational classrooms and laboratories.
95. Uphold acceptable standards of student behavior in vocational classrooms and laboratories.
96. Carry out approved disciplinary action when warrented.
97. Encourage students to exercise self-discipline.
98. Control outbursts of fighting and agressive behavior.
99. Maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.
100. Arrange for the storage and security of vocational supplies and equipment.
101. Control heat, light, and ventilation in vocational laboratories and classrooms.

GUIDANCE

102. Maintain an open door policy for student consultation.
103. Develop constructive working relationships among students.
104. Encourage students to discuss career aspirations.
105. Demonstrate personal concern for the student and his family.
106. Demonstrate a regard for and an interest in the students as individuals.
107. Conduct a conference for counseling a student.
108. Encourage a two-way communication during a conference with a student.
109. Assist students in developing good study habits.
110. Recognize potential problems of students.
111. Assist students in determining ways to best describe their saleable skill.
112. Refer students to qualified personnel agencies for occupational and educational information.
113. Establish communication patterns for exchanging information and for cooperating with the guidance counselor.
114. Present information to students on post-high school training and educational opportunities available to them.
115. Present information to students on employment opportunities.
116. Write letters of recommendation for students.
117. Assist graduates or seniors in preparing for interview with potential employers.
118. Assist students in securing and filling applications for jobs, scholarships, educational loans, of college admission.

SCHOOL-COMMUNITY RELATIONS

119. Provide brochures to inform the school and community of the vocational program.
120. Provide displays in the school and in the community on the vocational program.
121. Express a philosophy consistent with that of the vocational staff.
122. Speak to school and community groups on the vocational program.
123. Conduct an open house to familiarize members of the school and community with acitivites of the vocational program.
124. Serve in professional non-vocational organizations to improve the image of the vocational program.
125. Obtain informal feedback on the vocational program through contacts with individuals in the school and community.
126. Maintain working relationships with the school supporting staff through cooperation and mutual effort.

PROFESSIONAL ROLE AND DEVELOPMENT

127. Identify current trends of the teaching profession.
128. Promote the attainment of the goals and objectives of the teaching profession.
129. Express a professional philosophy relevant to the basic goals of teaching.
130. Evaluate periodically his educational philosophy in relation to that held by a majority of other members of the teaching profession.
131. Exchange observational visits, innovations, and ideas with other teachers.
132. Maintain ethical standards expected of a professional educator.
133. Support professional organizations through membership and attendance at meetings.
134. Serve professional organizations as an officer and/or chairman or member of a committee.

135. Represent the teaching profession as a committee member of delegate to meetings and activities of other professions.
136. Assist teachers who are new in the system to understand the policies and regulations of the school.
137. Work with a team of professionals from school and/or community on pertinent school problems.
138. Serve community needs by contributing professional expertise to civic projects.
139. Evaluate his personal and professional and personal abilities and limitations.
140. Select the position which is keeping with his personal and professional abilities and limitations.
141. Maintain professional certification through enrolling in graduate, extension and in-service education programs.
142. Expand educational background and leadership potential by achieving advanced degrees.
143. Acquire new occupational skills needed to keep pace with technological advancement in his teaching field.
144. Up-date his professional personnel file regularly.

Moore, Eddie A.; Bender, Ralph E. Professional Education Competency Needs of Groups of Vocational Agricultural Teachers in Ohio. Summary Research 3, CE 004562, ED 110755.

Department of Agricultural Education, Ohio State University, Columbus, Ohio, 1975.

The upper one-half of the professional education competencies in each category as rated in importance by the three groups of vocational agriculture teachers in Ohio are listed. Competencies in each category were ranked from highest to lowest based on the combined mean scores for the three groups of teachers.

PROGRAM PLANNING, DEVELOPMENT AND EVALUATION

1. Identify the competencies needed for entry into occupation.
2. Determine the occupations for which training is to be offered in the vocational agricultural program.
3. Assist in the identification of the school's vocational agriculture purposes and goals.
4. Identify the skill, knowledge, and attitudes required for the performance of each task included in a vocational agriculture offering.
5. Assess the relevancy of the vocational agriculture offerings.
6. Analyze long-range needs for the offerings of the vocational agriculture program.
7. Describe the occupational standards of performance for each task in an occupation.
8. Collect occupational data from employers to identify vocational agriculture needs.
9. Recommend a vocational agriculture program based on findings of the community survey.
10. Assist in preparing the long-range program plans for vocational agriculture.
11. Collect student occupational interest data to identify vocational agriculture needs.
12. Communicate the date, place, and agenda for the advisory committee meetings to to all persons concerned.
13. Write student performance objectives for the vocational agriculture offering.
14. Specify the long-range facility, equipment and supply needs for the vocational agriculture program.
15. Assist in writing general objectives for the vocational agriculture program offerings.
16. Establish communication with employer representatives who will be involved in a community survey.
17. Analyze long-range needs for the offerings of the vocational agriculture program.

PLANNING OF INSTRUCTION

18. Plan the content of a lesson.
19. Determine student needs and interests.
20. Correlate unit content with on-the-job and/or laboratory experiences.
21. Obtain textbook, references, and other instructional material.
22. Plan student learning experiences for a lesson.

23. Select tools and/or equipment for a lesson.
24. Develop original instructional materials such as individualized related assignment sheets, transparencies, and charts.
25. Plan the introduction of a lesson.
26. Select teaching techniques for a lesson.
27. Assemble consumable supplies for instructional purposes.
28. Identify the student performance objectives for a lesson.
29. Write a lesson plan.

EXECUTION OF INSTRUCTION.

30. Direct student laboratory experience.
31. Illustrate with models and real objects.
32. Present a concept or principle through a demonstration.
33. Demonstrate a manipulative skill.
34. Reinforce learning.
35. Enrich instruction to challenge the abilities of the more capable student.
36. Conduct field trips.
37. Direct students in preparing laboratory work or job plans.
38. Direct students in applying problem-solving techniques.
39. Employ question techniques.
40. Employ oral questioning techniques.
41. Establish frames of reference to enable the students to understand a situation from several points of view.
42. Present information by use of individualized instruction.
43. Introduce a lesson.
44. Acknowledge a student's verbal and nonverbal clues.
45. Present information with the assistance of a resource person.
46. Present information with analogies.
47. Present information with slides.

EVALUATION OF INSTRUCTION

48. Review student progress and/or achievement records to assess effectiveness of instruction.
49. Determine student's grade based on related instruction and laboratory or on-the-job experience.
50. Establish criteria for student performance.
51. Devise laboratory performance tests.
52. Appraise student's performance in relation to student performance objectives.
53. Appraise student's products according to occupational performance standards.
54. Seek opportunities for self-evaluation of instruction.
55. Administer teacher-made tests.
56. Engage in cooperative evaluation of achievement with students.
57. Evaluate individualized assignments completed under directed study.

MANAGEMENT

58. Uphold acceptable standards of student behavior in vocational agriculture classrooms and laboratories.
59. Carry out approved disciplinary action when warranted.
60. Provide approved safety apparel and devices for hazardous equipment.
61. Control outbursts of fighting and and aggressive behavior.

62. Encourage students to exercise self-discipline,
63. Uphold school standards of expected student behavior.
64. Maintain a record of safety instruction presented in compliance with safety laws and regulations.
65. Identify new tools and/or equipment needed for the academic year.
66. Formulate with students acceptable standards of behavior in vocational agriculture classrooms and laboratories.
67. Schedule laboratory equipment for maximum utilization by students.
68. Prepare purchase requests for approved vocational agriculture equipment and supplies.
69. Devise a filing system for instructional materials.
70. Arrange laboratory work areas and storage space to facilitate student work performance.
71. Arrange layout of the vocational agriculture laboratory to stimulate the occupational environment.

GUIDANCE

72. Demonstrate a regard for and an interest in students as individuals.
73. Demonstrate personal concern for the student and his family.
74. Maintain an open door policy for student consultation.
75. Develop constructive working relationships among students.
76. Conduct a conference with a student.
77. Communicate with prospective and continuing students during the summer.
78. Present information to students on occupational opportunities.
79. Recognize potential problems of students.
80. Determine student's background and environment.
81. Assist students in developing good study habits.
82. Assist graduating students in preparing for interviews with potential employers.

SCHOOL-COMMUNITY RELATIONS

83. Maintain working relationships with the school administration and faculty.
84. Maintain working relationships with the school supporting staff through cooperation and mutual effort.
85. Plan the school-community relations activities for the vocational agriculture program.
86. Obtain information from parents relative to their expectations of the vocational agriculture program.
87. Conduct an open house to familiarize members of the school and community with activities of the vocational agriculture program.
88. Procure clearance from the school administration to conduct school-community relations activities related to the vocational agriculture program.
89. Obtain informal feedback on the vocational agriculture program through contacts with individuals in the school and community.
90. Acquire information from members of the community power structure (e.g., political, social and economic pressure groups) regarding their expectations of the vocational agriculture program.
91. Serve in a community civic, service, or social organization to improve the image of the vocational agriculture program.
92. Speak to school and community groups on the vocational agriculture program.

STUDENT FFA ORGANIZATION

93. Conduct an organizational meeting for the student FFA organization.
94. Assist students with the financial management of the student FFA organization.
95. Acquaint prospective members and their parents with the purposes, activities, and values of the student FFA organization.
96. Participate in district, state, regional and national activities of the student FFA organization.
97. Conduct a leadership training session for the officers of the student FFA organization.
98. Assist students in developing a yearly program of work for the student FFA organization.
99. Orient students to the student FFA organization.
100. Supervise social and educational activities for the student FFA organization.
101. Provide advice for student entries in the state and national student FFA organizations.

PROFESSIONAL ROLE AND DEVELOPMENT

102. Acquire new occupational skills and information needed to keep pace with technological advancement in vocational agriculture.
103. Maintain the ethical standards expected of a professional educator.
104. Select the teaching position which is in keeping with personal and professional abilities and limitations.
105. Keep up-to-date through reading professional literature.
106. Maintain professional certification through enrolling in graduate, extension, and in-service education programs.
107. Exchange observational visits, innovations and ideas with others in the profession.
108. Consult regularly with the student teacher regarding planning, implementing and evaluating teaching.
109. Promote the attainment of the goals of the teaching profession.

COORDINATION

110. Develop a procedure to insure student's safety and protection in the training station.
111. Check the student-learner's progress with the on-the-job instructor and other training station personnel.
112. Maintain good working relationships with training station personnel.
113. Evaluate the student-learner's work qualities and habits on the job.
114. Evaluate the quality of the on-the-job training received by the student learner.
115. Assess safety provisions of the facilities and equipment of the prospective training stations.
116. Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation.
117. Develop a systematic training plan with the cooperating employer and/or the on-the-job instructor.
118. Assist the student-learner in on-the-job training orientation.
119. Prepare the student-learner for an interview with the cooperating employer and training station personnel.
120. Assist the student-learner in the solution of problems related to on-the-job training.

121. Control student-learner absenteeism from school and on-the-job training.
122. Develop a plan for supervision of on-the-job training.
123. Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.
124. Examine the student-learner's progress reports to determine future on-the-job training experiences and related instruction.
125. Develop a training agreement between student-learner, parent, school and cooperating employer.
126. Identify prospective cooperative employers to provide on-the-job training stations.
127. Assess the student-learner's performance with the assistance of the on-the-job instructor.
128. Match a student-learner's unique characteristics with an appropriate training station.
129. Obtain suggestions from the on-the-job instructor to guide the selection of lessons for related instruction.
130. Check the student-learner's progress in acquiring skills on the job.
131. Evaluate the student-learner's personal traits and characteristics on the job.

Performance-Based Curricula Program, The Center For Vocational Education. Vocational Teacher Competency Profile.

Center for Vocational Education, The Ohio State University, Ohio, August 1975.

PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION

1. Plan a community survey.
2. Collect and analyze community survey data.
3. Organize or reorganize an occupational advisory committee.
4. Report and use the findings of a community survey.
5. Maintain an occupational advisory committee.
6. Develop vocational education program goals and objectives.
7. Conduct an occupational analysis.
8. Develop a course of study.
9. Develop long-range plans for a vocational program.
10. Conduct a student follow-up program.
11. Evaluate your vocational program.

INSTRUCTIONAL PLANNING

12. Determine needs and interests of students.
13. Develop student performance objectives.
14. Plan a unit of instruction.
15. Write a lesson plan.
16. Select and obtain student instructional materials.
17. Prepare teacher-made instructional materials.

INSTRUCTIONAL EXECUTION

18. Direct individual and group field trips.
19. Conduct group discussions, panel discussions, and symposia.
20. Stimulate learning through brainstorming, buzz group, and question box techniques.
21. Direct students in instructing other students.
22. Employ simulation techniques.
23. Direct student study.
24. Direct student laboratory experience.
25. Direct students in applying problem-solving techniques.
26. Direct the project method.
27. Introduce a lesson.
28. Summarize a lesson.
29. Employ oral questioning techniques.
30. Employ reinforcement techniques.
31. Provide instruction for slower and more capable students.
32. Present information through an illustrated talk.
33. Demonstrate a manipulative skill.
34. Demonstrate a concept or principle.
35. Direct individualized instruction.
36. Conduct team teaching.
37. Present information using a subject matter expert.

38. Illustrate with bulletin boards and exhibits.
39. Illustrate with models, real objects, and flannel boards.
40. Present information with overhead and opaque materials.
41. Present information with filmstrips and slides.
42. Present information with films.
43. Present information with audio recordings.
44. Present information with televised and video-taped materials.
45. Direct programmed instruction.
46. Present information with the chalkboard and flip chart.

INSTRUCTIONAL EVALUATION

47. Establish criteria for student performance in a vocational educational program.
48. Assess student cognitive performance.
49. Assess student affective performance.

50. Assess student psychomotor performance.
51. Determine student grades in a vocational course.
52. Evaluate instructional effectiveness.

INSTRUCTIONAL MANAGEMENT

53. Project instructional resource needs.
54. Prepare vocational budget.
55. Arrange for expanding facilities and/or for purchasing supplies for the vocational program.
56. Maintain a filing system.
57. Provide for the safety needs of vocational students.
58. Provide for the first aid needs of vocational students.
59. Assist students in developing self-discipline.
60. Organize the vocational laboratory.
61. Manage and maintain the vocational laboratory.

GUIDANCE

62. Select and use appropriate student data-collection sources and techniques.
63. Gather student data through personal contacts.
64. Use conferences to help students meet personal, educational and vocational needs.
65. Provide information on educational and career opportunities.
66. Assist students in applying for employment or further education.

SCHOOL COMMUNITY RELATIONS

67. Develop a plan for school-community relations.
68. Give presentations to school and community groups to promote a vocational education program.
69. Provide brochures to inform the school and community about the vocational education program.
70. Provide displays in the school and community on the vocational program.
71. Prepare news releases and articles to promote the vocational program.
72. Plan, develop, and present television and radio programs to promote the vocational program.
73. Conduct an open house.

74. Provide service to and maintain liaison with members of the community.
75. Cooperate with state and local educators.
76. Obtain feedback from the school and community concerning the vocational education program.

STUDENT VOCATIONAL ORGANIZATION

77. Develop a personal philosophy toward student vocational organizations.
78. Establish a student vocational organization.
79. Prepare students for leadership roles in the student vocational organization.
80. Assist students in developing and financing a yearly program of activities.
81. Supervise activities of the student vocational organization.
82. Provide learning experiences for vocational students through contests.

PROFESSIONAL ROLE AND DEVELOPMENT

83. Keep up-to-date in your profession and in your occupation specialty.
84. Serve your teaching profession.
85. Establish and maintain a professional philosophy of education.
86. Serve the school and community.
87. Select, obtain and maintain a teaching position in keeping with your professional qualifications.
88. Plan and provide laboratory experiences for prospective teachers.
89. Plan the student teaching experience.
90. Supervise student teachers.

COORDINATION

91. Establish criteria and guidelines for operating a cooperative vocational education program.
92. Establish and apply policies for managing student attendance, transfers, and terminations.
93. Identify and enroll prospective students.
94. Identify and secure prospective training stations.
95. Place students on the job.
96. Develop the training ability of on-the-job instructors.
97. Coordinate and supervise on-the-job instruction.
98. Evaluate students on-the-job.
99. Plan and conduct related instruction.
100. Conduct an employer-employee appreciation event.

Perkins, Lawrence. Competencies of Trade and Industrial Teachers. ED 112067.

Florida State Department of Education, Vocational-Technical and Adult Division, July 1975.

RELATIVE IMPORTANCE OF SELECTED TEACHER COMPETENCIES AS RATED BY TRADE AND INDUSTRIAL TEACHERS WITH MORE THAN THREE YEARS TEACHING EXPERIENCE.

In order of importance.

1. Maintain a safety and accident prevention program in compliance with safety laws and regulations.
2. Determine and provide appropriate safety apparel and devices for activities of a hazardous nature.
3. Assist students in developing positive attitudes toward efficient work habits and quality workmanship.
4. Maintain up-to-date expertise in one's vocational trade or occupational specialty area to include skills, knowledge and favorable work habits.
5. Display vigor, enthusiasm and interest in students and in teaching.
6. Maintain a positive attitude and high level of confidence toward self.
7. Plan a unit of instruction.
8. Motivate students to develop necessary skills and knowledge to succeed in a payroll job.
9. Conduct appropriate procedures for attending to medical problems and first aid needs of students.
10. Correct disciplinary problems consistent with school policy, fairly and decisively.
11. Perform teaching in a neat and workmanlike manner.
12. Exhibit a positive attitude toward the school, staff and objectives.
13. Demonstrate behavioral patterns and ethical procedures appropriate for a professional vocational educator.
14. Exhibit a positive attitude toward recommended machine and tool use and care.
15. Exhibit a positive attitude toward work and the contribution of manual labor to our society.
16. Skillfully use laboratory demonstration teaching methods.
17. Develop a lesson plan.
18. Communicate with students as individuals.
19. Conduct teaching in an organized orderly procedure.
20. Interpret local, state and national safety and health codes regarding use and care of vocational education facilities.
21. Include new and changing technological advances in laboratory and classroom instruction.
22. Maintain clean and orderly working surroundings.
23. Maintain tools and lab equipment in a highly usable condition.
24. Construct and use performance exams.
25. Evaluate and select textbooks and reference materials.
26. Know and conform to state laws relative to education.
27. Assist students to develop study skills to produce favorable results.
28. Apply appropriate principles of learning to the teaching of trade and industrial subjects.

29. Establish criteria for evaluation of student performance in a trade and industrial offering.
30. Assist students in developing positive attitudes toward the value and importance of public acceptance and support of vocational education programs.
31. Use effective communications in behaviorally, orally and written form.
32. Assist the student to develop values, attitudes and beliefs which will enhance leadership performance and potential.
33. Organize and maintain the vocational laboratory.
34. Promote an attendance program that will provide positive pupil, parent and community attitudes toward regular school attendance.
35. Skillfully use the classroom lecture teaching method.
36. Assist student learners in preparing for job interviews.
37. Construct a comprehensive course of study to include the course description objective, instructional content, student assignments, teacher lectures, and demonstrations, reference materials and textbooks and comprehensive examination.
38. Manage equipment and supplies in the vocational laboratory.
39. Skillfully use supervised classroom or laboratory assigned exercise teaching methods.
40. Skillfully use student problem solving teaching methods.
41. Select, obtain and design instructional material for individualized learning activities in trade and industrial areas.
42. Make efficient use of time and materials.
43. Organize and use local craft advisory committees in a specialized vocational service area.
44. Promote, organize, and conduct appropriate classroom and laboratory housekeeping practices.
45. Assist students in applying for jobs or further education.
46. Recognize and provide for individual differences in students.
47. Develop a procedure to use live lab work (e.g., automobile repair) provided by community citizens for most effective learning experiences for students.
48. Demonstrate professional dress and physical appearance appropriate of a professional vocational educator.
49. Write performance objectives for vocational education offerings which are meaningful, measurable and can be read and understood by the student.
50. Evaluate and select instructional aids.
51. Demonstrate appropriate working relationships with other teachers and the school staff.
52. Demonstrate socially acceptable standards of behavior both on and off the vocational school premises.
53. Use graphic materials, educational displays and real objects for instructional aids.
54. Inform students of current employment opportunities.
55. Aid students in developing educational and career goals.
56. Evaluate co-op students' on-the-job development.
57. Skillfully use supervised individual lab projects and problems.
58. Analyze an occupation.
59. Prepare a student accident report using appropriate report forms.
60. Assist the school in creating an atmosphere in which democratic leadership can grow and flourish.
61. Skillfully use supervised classroom assignments teaching methods.

62. Evaluate facilities and equipment needs for a specialized vocational area.
63. Express a personal philosophy of vocational education to include the basic principles of vocational education and why it should be offered in public schools.
64. Know where and when teacher education courses are offered.
65. Assist in establishing admission criteria for students into vocational programs.
66. Skillfully use supervised group lab projects and problems teaching methods.
67. Use the information available in professional and technical journals for improved teaching.
68. Identify and analyze provisions of local, state and federal laws pertaining to teacher authority and liability.
69. Skillfully use the individualized programmed instruction teaching method.
70. Maintain an inventory of classroom and laboratory supplies, tools, and equipment.
71. Prepare purchase orders for instructional materials, consumable supplies and capital outlay equipment.
72. Identify and correct situations which hinder the achievement of instructional goals.
73. Prepare materials, equipment, and facilities budget for a vocational instructional area or unit.
74. Work with colleges and universities to obtain needed professional, technical and general education services.
75. Assemble pertinent student data for necessary record keeping.
76. Inform students of training and educational opportunities available to them after they complete the vocational course.
77. Promote unity and balance between vocational and general education.
78. Assess competency capability of personnel at the co-op training stations.
79. Maintain favorable relations with staff in other schools.
80. Skillfully use the question and answer teaching method.
81. Sequence student learning assignments for individualized instruction.
82. Ascertain the reason students leave or discontinue the vocational education program.
83. Demonstrate a knowledge of curriculum development procedures for vocational programs.
84. Establish and maintain effective relationships with labor, management and other manpower organizations.
85. Assist in the orientation of teachers who are new to the school system.
86. Assist vocational administrators, engineers and construction contractors in planning appropriate vocational education facilities.
87. Plan special instructional strategies for the disadvantaged and handicapped students.
88. Develop criteria standards (consistent with school policy) for scoring progress and reporting of student achievements.
89. Assemble and maintain professional resource material for personal use.
90. Develop a long range teaching plan.
91. Know Florida program and facility standards.
92. Develop co-op training agreements involving appropriate student-learners, employing agencies, parents, and vocational school officials.
93. Identify and select appropriate library resource materials.
94. Assess adequacy of the prospective co-op training station's facilities and equipment.
95. Compile and use appropriate occupational information and data for counseling students.

96. Interpret and uphold legal provisions and regulations governing the employment of student-learners.
97. Accept gifts or donations of supplies and equipment for the program in accordance with appropriate administrative procedures and school policy.
98. Locate and use community resources in instructional planning and facilities operation.
99. Assist students with the solution to personal and social problems.
100. Skillfully develop and use oral exams.
101. Use miscellaneous teaching methods.
102. Provide service and maintain liaison with members of the community.
103. Prepare reports for instruction.
104. Assist the school administration in maintaining proper business records. and accounts for a specialized vocational trade or technical program.
105. Aid student-learners in procuring work permits from school districts.
106. Demonstrate a knowledge of the latest concepts of career education and its relation to vocational education.
107. Actively pursue an appropriate long-range professional development plan.
108. Allow students to participate in the evaluation of instruction.
109. Utilize the latest findings of research about teaching.
110. Assist the school staff effort to encourage and stimulate the in-service professional preparation and growth of fellow teachers.
111. Select and secure co-op training stations.
112. Use transparencies effectively.
113. Identify problem areas needing research study.
114. Organize and maintain a job placement program for students.
115. Establish a system (consistent with school policy) for repairing and servicing classroom/laboratory tools and equipment.
116. Skillfully use large group or small group discussion teaching methods.
117. Skillfully develop and use picture exams.
118. Assist the student to effectively work with people, in various groupings, organizations and agencies.
119. Inform students, parents and school officials how vocational education objectives are derived, stated and used.
120. Conduct follow-up studies of former vocational students.
121. Pre-assess a student's competency level for prescribing instruction, using a variety of appropriate proficiency tests.
122. Analyze test items for discrimination, validity and reliability coefficients.
123. Skillfully use the student recitation teaching method.
124. Relate the vocational educational curricula to the total instruction in a comprehensive high school curricula.
125. Plan, prepare and conduct an open house to promote a vocational education program.
126. Support appropriate professional, social and civic group organizations or associations.
127. Identify and utilize services provided by national, state and local professional organizations.
128. Identify and provide for future influences which are likely to bring change to vocational education curriculum.
129. Establish and maintain a plan (consistent with school policy) for use of given vocational laboratory and equipment by other vocational school personnel and outside groups.
130. Prepare promotional materials to explain vocational programs to the lay public.
131. Assist the school administrator in determining student/customer cost billings for equipment usage and materials consumption.

132. Give presentations to community groups to promote a vocational education program.
133. Skillfully develop and use multiple choice exam items,
134. Plan the internship experience for future teachers,
135. Maintain an up-to-date professional personal file,
136. Reproduce instructional materials using appropriate available supplies and audio-visual equipment.
137. Identify groups of students to be served and the types of organized vocational programs offered for preparatory and extension classes.
138. Provide consultant services to local business and industry.
139. Conduct community and labor market surveys.
140. Improvise organizational and procedural arrangements which will encourage and develop democratic procedure in the attack on vocational education problems.
141. Skillfully develop and use matching exam items.
142. Skillfully use free elective laboratory projects teaching methods.
143. Develop an annual plan for school-community relations.
144. Guide, plan, develop and participate in the Vocational Industrial Clubs of America (VICA) activities.
145. Relate educational foundations (Sociological, psychological, philosophical and historical) to vocational education situations.
146. Conduct a leadership training session for the student officers of VICA.
147. Promote public awareness of a community survey findings.
148. Interpret local, state and national results on issues affecting support for vocational education.
149. Discuss the relationship and differences between the aims, goals and objectives for secondary education, industrial arts education, vocational education and career education.
150. Skillfully develop and use miscellaneous exam items.
151. Interpret and apply the Florida State Plan for the administration of vocational education programs within the vocational school and administration.
152. Obtain data and complete reports for local, state, and federal government agencies regarding the operation and evaluation of vocational programs.
153. Utilize students' cumulative recorded data for planning educational experiences.
154. Skillfully develop and use true-false exam items.
155. Prepare travel and expense budgets.
156. Identify federal, state and local agencies responsible for administering vocational education.
157. Maintain a file of publications available from VICA.
158. Skillfully develop and use subjective essay exam items.
159. Relate the history and development of vocational education to local, state and national social and economic growth.
160. Identify and interpret the major acts of federal legislation which laid the foundation for today's vocational education programs.
161. Prepare articles for publication in professional and technical journals.
162. Skillfully use home work assigned exercise teaching methods.
163. Relate the history, and trace the development of the labor union movements and its influence on vocational education.
164. Assist with non-instructional school activities (1. school playground supervisor, 2. bus duty, 3. chaperoning, etc.).

Richey, Rita C., *Vocational and Applied Arts Education Pre-Certification Teacher Education Program: Competency and Performance Hierarchies.*

Vocational and Applied Arts Education, Division of Teacher Education, College of Education, Wayne State University, Detroit, Michigan, 1974.

1. Select and develop program goals.
2. Determine student needs and goals.
3. Select and develop instructional content for a course.
4. Select and develop instructional content for a lesson.
5. Formulate behavioral objectives for lessons, units and courses.
6. Analyze and organize the sequence of learning tasks (skills, operations, procedures).
7. Develop instructional units.
8. Construct a lesson plan.
9. Select teaching strategies and delivery systems.
10. Determine in-school learning experiences (classroom and/or laboratory).
11. Determine and select appropriate instructional resources.
12. Develop a system for recording and filing subject matter information relevant to course planning.
13. Prepare directions for substitute teachers.
14. Select and/or design instructional materials and procedures for individualized learning activities.
15. Use systems model in planning and managing the learning environment.
16. Reproduce instructional material using appropriate available equipment.
17. Set up display materials for instructional purposes.
18. Teach a lesson.
19. Demonstrate a variety of methods and techniques.
20. Present a lesson using appropriate multi-media equipment and material.
21. Supervise student laboratory experiences.
22. Establish and demonstrate regular procedures for the safe use, storage and maintenance of tools and equipment.
23. Formulate a plan for grading accommodating policy and criterion-referenced procedures.
24. Establish criteria for evaluation of lessons, units or courses.
25. Evaluate the delivery system's effect in terms of pre-state objectives.
26. Provide for the student's assessment of progress in class, home and laboratory assignments.
27. Monitor student progress and provide constructive feedback.
28. Work with guidance counselor to provide services.
29. Refer students to qualified personnel agencies and/or provide occupational and educational information.
30. Refer students to qualified agencies and/or provide assistance with personal, social or scholastic problems.
31. Devise a means of determining student attitude.
32. Organize class at beginning of term.
33. Establish order of business each day.
34. Define the operating rules and responsibilities of both learner and the teacher-manager.
35. Provide for the physical management of the learning environment.

36. Handle hostile acts decisively.
37. Express displeasure in the act and not the person.
38. Design behavior modification systems which produce desired changes in the classroom behavior; i.e., discipline.
39. Demonstrate knowledge of the ethical procedures of a professional.
40. Use correct oral and written communication.
41. Demonstrate a commitment to teaching.
42. Demonstrate awareness of the purpose and programs of appropriate professional associations.
43. Keep abreast of professional developments, societal needs, and technological advances.
44. Demonstrate a respect, love and empathy, for learners as growing, developing and feeling human beings.

Spaziani, Richard L.; Courtney, E. Wayne. The Application of Bloom's Cognitive Taxonomy to Selected Professional Education Competencies.

Division of Vocational, Adult, and Community College Education; Oregon State University, Corvallis, VTO 13610, ED052376, 1971.

INSTRUCTIONAL PROCESS

1. Provide practical shop or laboratory experiences to enhance classroom learning.
2. Motivate students in the classroom, shop or laboratory.
3. Utilize individualized instruction materials and techniques.
4. Develop classroom instruction based upon the individual needs of the learner.
5. Provide appropriate practice for development of basic skills.
6. Use the information contained in professional journals for personal improvement of instruction.
7. Teach at the student's level and rate of learning.
8. Maintain student attention during classroom presentations or demonstrations.
9. Develop student learning activities to facilitate instruction.
10. Relate current events associated with your subject matter area to classroom instruction.
11. Be stimulating in your work as an instructor.

PROFESSIONAL IMAGE

12. Adapt your appearance and appeal to acceptable standards for instruction.
13. Adhere to the code of ethics adopted in your (comm. coll/secondary school).
14. Organize or work with local vocational advisory committee.
15. Maintain a clean, orderly laboratory or classroom.
16. Participate in professional organizations related to your subject matter area.
17. Utilize the services of local and state vocational education agencies.
18. Maintain discipline in the classroom, shop or laboratory.
19. Participate in outside trade, business, or professional organizations related to your subject matter area.
20. Communicate your ideas or point of view to other instructors or administrators.
21. Inform students of the nature and requirements of specific occupations.
22. Work cooperatively with people in the community.

PREPARATION FOR INSTRUCTION

23. Interpret the goals and objectives of vocational education.
24. Develop audio-visual materials for instructional purposes.
25. Select textbooks and instructional materials for the classroom, shop or laboratory.
26. Develop objective tests to measure achievement.
27. Relate the course of study to measurable performance objectives.
28. Break down an occupation or job into its component parts for instructional or guidance purposes.
29. Write performance objectives.

30. Make a daily lesson plan.
31. Evaluate the effectiveness of a classroom or laboratory demonstration.
32. Develop performance tests to measure achievement.
33. Develop subjective tests to measure achievement.

INSTRUCTIONAL ORGANIZATION

34. Interpret the innovative provisions of the Vocational Act as amended in 1968.
35. Interpret the goals of general education.
36. Interpret the history of vocational education.
37. Interpret state certification requirements for instructors.
38. Assist in the development of the total (community college/secondary school) program.
39. Interpret the state specifications and requirements for vocational facilities.
40. Interpret the philosophy of the comprehensive (community college/secondary school).
41. Interpret the philosophy of the (community college/secondary school) in providing vocational programs for the student.
42. Provide special training or assistance to disadvantaged and handicapped students.
43. Use the State Plan for Vocational Education in securing reimbursement for vocational programs.
44. Interpret the history of education.
45. Formulate your own educational philosophy.
46. Utilize state guidelines for curriculum planning.
47. Identify the similarities and differences between the goals of general and vocational education.
48. Interpret the objectives of vocational education to others.
49. Conduct community surveys to improve instruction or plan programs.
50. Distinguish between two or more educational philosophies.
51. Use counseling techniques to help students solve personal and social problems.
52. Interpret the socio-economic class structure of the local community in relation to students enrolled in vocational programs.
53. Identify acceptable community social behaviors for instructors.
54. Identify local community power structures and pressure groups.
55. Interpret school policies.
56. Provide programs for the students with special needs.
57. Write articles for news releases.

Vogler, Daniel E., and Patton, Gregory. The Development and Implementation of Pre-Service and in-Service Occupational Teacher Education Programs Designed to Meet Certification and Baccalaureate Degree Requirements. Project Report No. 3.

School of Education, Michigan University, Ann Arbor, Michigan, June 1974.

1. Write a lesson plan.
2. Plan the introduction of a lesson.
3. Identify the unit topics for a course.
4. Identify lesson topics for a unit.
5. Determine objectives for a unit.
6. Write student performance goals for the vocational education courses.
7. Determine student needs and goals.
8. Identify the specific objectives for a lesson.
9. Sequence performance goals (objectives) for a course.
10. Determine group and individual learning experiences for a unit based on individual differences of students.
11. Plan student learning experiences for a lesson.
12. Plan the content of a lesson.
13. Write content outline for a unit.
14. Select teaching techniques for a lesson.
15. Plan the summary of a lesson.
16. Establish criteria for student performance.
17. Select methods of evaluating students' performance throughout a unit.
18. Select methods of evaluating students' attainment of lesson objectives.
19. Review student progress and/or achievement records to assess effectiveness of instruction.
20. Formulate multiple choice test items.
21. Formulate essay test items.
22. Formulate true-false test items.
23. Formulate test items for an oral exam.
24. Formulate matching test items.
25. Formulate completion test items.
26. Present information through individualized instruction.
27. Arrange for students to evaluate their own progress.
28. Engage in cooperative evaluation of achievement with students.
29. Appraise students' performance in relation to instructional goals.
30. Appraise students' products according to performance standards of the occupations.
31. Evaluate individualized related assignments completed under directed study.
32. Administer teacher made tests.
33. Direct student study of information and assignment sheets.
34. Direct student presentations.
35. Direct student presentations describing activities of the vocational program.
36. Direct students in instructing other students.
37. Lead group discussions.
38. Conduct panel discussions.
39. Direct students in applying problem-solving techniques.
40. Conduct brainstorming sessions.
41. Conduct group supervised study.
42. Present information with analogies.

43. Present information by the project method.
44. Formulate cooperatively with students procedures which provide for their participation in the evaluation of instruction.
45. Give an assignment.
46. Give an illustrated talk.
47. Direct student study of textbooks, bulletins, and pamphlets.
48. Demonstrate a manipulative skill.
49. Present a concept or principle through a demonstration.
50. Give a lecture.
51. Employ role-playing techniques.
52. Introduce a lesson.
53. Conduct buzz groups.
54. Present information through team teaching.
55. Involve the students in planning a unit.
56. Enrich instruction to challenge the abilities of the abler student.
57. Establish frames of reference to enable the students to understand a situation from several points of view.
58. Apply non-verbal techniques such as gestures, facial expressions and silence.
59. Employ reward techniques.
60. Conduct field trips.
61. Obtain summary for a lesson.
62. Employ oral questioning techniques.
63. Reinforce learning.
64. Acknowledge student verbal and non-verbal cues.
65. Uphold school standards of expected student behavior.
66. Uphold acceptable standards of student behavior in vocational classrooms and laboratories.
67. Control outbursts of fighting and aggressive behavior.
68. Carry out approved disciplinary action when warranted.
69. Assist students in developing good study habits.
70. Record vocational students' attendance according to school policy.
71. Formulate a system of grading consistent with school policy.
72. Record vocational students' grades according to school policy.
73. Express a philosophy relevant to the basic goals of the teaching profession.
74. Promote the attainment of the goals and objectives of the teaching profession.
75. Express a philosophy consistent with that of the vocational staff.
76. Express a philosophy consistent with the objectives of vocational and technical education.
77. Support professional organizations through membership and attendance at meetings.
78. Use a self-analysis form to evaluate one's personal and professional abilities and limitations.
79. Evaluate periodically one's educational philosophy in relation to that held by a majority of other members of the teaching profession.
80. Review general objectives for the program.
81. Assist in the identification of the vocational education purposes and objectives for the school.
82. Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.
83. Present information to students on occupational opportunities.
84. Devise a system for maintaining occupational information and opportunity data for use by vocational students.
85. Serve in professional non-vocational organizations to improve the image of the vocational program.

86. Contact state department personnel regarding the steps to be followed in organizing the student vocational organization.
87. Assist students in developing a yearly program of activities of the student vocational organization.
88. Coordinate student vocational organization acitivities with instructional activities.
89. Maintain a file of publications available for the student vocational organization.
90. Maintain the student vocational organization as an integral part of the instructional program.
91. Evaluate the student vocational organization.
92. Affiliate the student vocational organization with the state and national vocational organization.
93. Present information with sound motion pictures.
94. Direct written programmed instruction.
95. Present information with the assistance of a resource person.
96. Present information with film strips.
97. Present information with an opaque projector.
98. Involve students in the preparation of instructional material.
99. Develop original instructional materials such as individualized related assignment sheets, transparencies, charts.
100. Present information with single concept films.
101. Direct the use of simulation materials.
102. Present information with an overhead projector.
103. Illustrate with models and real objects.
104. Present information with a tele-speaker (telephone amplifier).
105. Employ question box technique.
106. Prepare instructional material with a spirit duplicator.
107. Present information with slides.
108. Prepare instructional (hard copy and transparency) material with photocopier.
109. Present information with bulletin boards.
110. Present information with audio recorder.
111. Present information with the aid of a flip chart.
112. Seek opportunities for self-evaluation of instruction through self-rating devices and instructional media such as video or audio recording.
113. Present information with a video recorder or closed circuit television.
114. Devise a filing system for instructional materials.
115. Present information with the aid of a flannel board.
116. Present information with the aid of a chalkboard.
117. Present information with educational television.
118. Present information with a phonograph.
119. Direct teaching machine programmed instruction.
120. Obtain textbook, reference and other instructional material.
121. Examine own feelings about people who differ from oneself in social class.
122. Examine own feelings about people who differ from oneself in race.
123. Examine own feelings about people who differ from oneself in background.
124. Examine interpretations of situations from differences in background.
125. Examine interpretations of situations from differences in subculture.
126. Demonstrate an understanding of what it is like to live in the inner city.
127. Demonstrate respect for students as individuals.
128. Consult local sources (MESC and others) to obtain information on employment prospects for graduates of inner-city occupational programs.
129. Identify current trends of teaching in the inner city.

130. Identify effective practices of teaching in the inner city.
131. Establish criteria for selecting student-learners for inner city occupational programs in your occupational area.
132. Identify personal habits of individual students.
133. Identify attitudes of individual students.
134. Obtain information on student-learner interest.
135. Obtain information regarding student's environments.
136. Assess the relevancy of the vocational course offerings.
137. Identify the services rendered by metropolitan area public service agencies.

APPENDIX C

Competency Lists Part 3: For Middle Management Positions Such As Coordinators, Department Heads, Supervisors, and Work/Study Cooperative Education Coordinators.

Five Lists from National Studies

Huffstutler and McCallon............page 204
University of Pittsburgh............page 207
Meyer, Crawford and Klaurens........page 213
Parks...............................page 232
Temple..............................page 234

Huffstutler, E. Vaughn; McCallon, Earl L.
STUDY OF NEEDS FOR VOCATIONAL-TECHNICAL PROFESSIONAL DEVELOPMENT IN TEXAS; final report. Texas Education Agency, Austin, Division of Occupational Research and Development, 1973. ED 087905.

PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION

1. Collect occupational data from employers to identify vocational education needs.
2. Identify the role and function of the advisory committee.
3. Assist in the identification of the vocational education purposes and objectives for the school.
4. Identify the competencies needed for entry into an occupation.
5. Describe the occupational standards of performance for each task in an occupation.
6. Assist in writing general objectives for courses offered in the vocational ed program.
7. Identify knowledge and attitudes required for the performance of each occupational task included in a course.
8. Write student performance goals for vocational ed courses.
9. Consult advisory committee in developing a long-range program plan for vocational ed.
10. Analyze long-range course needs for the vocational ed program.
11. Specify long-range facility, equipment, and supply needs for the vocational ed program.
12. Assist in preparing the long-range program plan for vocational ed in the school.
13. Maintain continual follow-up information on placement, employment, and training status of each graduate of the vocational program.
14. Determine the reasons students drop-out of the vocational program.
15. Assess the relevancy of the vocational course offerings.
16. Assess the adequacy of the vocational education facilities and equipment relative to technological changes.
17. Disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.

MANAGEMENT

18. Compile a list of supplies needed for the academic year.
19. Identify new tools and equipment needed in a vocational course for the academic year.
20. Recommend reference books and periodicals related to vocational education that should be added to the library.
21. Prepare a capital outlay budget proposal for new equipment needed in a vocational course.
22. Plan an operating budget proposal for consumable supplies, services, and materials needed in a vocational course.
23. Prepare a budget for estimated travel expenses incurred in vocational activities.
24. Arrange for additional vocational facilities to accommodate expanded enrollments and technological advancements in a course.

25. Prepare purchase request for approved vocational equipment and supplies.
26. Supply administrators with data for vocational reports required by the state department of education.
27. Devise a system for maintaining occupational information and opportunity data for use by vocational students.
28. Devise a filing system for instructional materials.
29. Hold a school standards of expected student behavior.
30. Formulate with students acceptable standards of behavior in vocational classrooms and laboratories.
31. Uphold acceptable standards of student behavior in vocational classrooms and laboratories.
32. Carry out approved disciplinary action when warrented.
33. Encourage students to exercise self-discipline.
34. Control outbursts of fighting and agressive behavior.
35. Maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory.
36. Arrange for the storage and security of vocational supplies and equipment.
37. Control heat, light, and ventilation in vocational laboratories and classrooms.

GUIDANCE

38. Maintain an open door policy for student consultation.
39. Develop constructive working relationships among students.
40. Encourage students to discuss career aspirations.
41. Demonstrate personal concern for the student and his family.
42. Demonstrate a regard for and an interest in the students as individuals.
43. Conduct a conference for counseling a student.
44. Encourage a two-way communication during a conference with a student.
45. Assist students in developing good study habits.
46. Recognize potential problems of students.
47. Assist students in determining ways to best describe their saleable skills.
48. Refer students to qualified personnel agencies for occupational and educational information.
49. Establish communication patterns for exchanging information and for cooperating with the guidance counselor.
50. Present information to students on post-high school training and educational opportunities available to them.
51. Present information to students on employment opportunities.
52. Write letters of recommendation for students.
53. Assist graduates or seniors in preparing for interview with potential employees.
54. Assist students in securing and filling applications for jobs, scholarships, educational loans, of college admission.

SCHOOL-COMMUNITY RELATIONS

55. Provide brochures to inform the school and community of the vocational program.
56. Provide displays in the school and in the community on the vocational program.
57. Express a philosophy consistent with that of the vocational staff.
58. Speak to school and community groups on the vocational program.
59. Conduct an open house to familiarize members of the school and community with activities of the vocational program.

60. Serve in professional non-vocational organizations to improve the image of the vocational program.
61. Obtain informal feedback on the vocational program through contacts with individuals in the school community.
62. Maintain working relationships with the school supporting staff through cooperation and mutual effort.

PROFESSIONAL ROLE AND DEVELOPMENT

63. Idnetify current trends of the teaching profession.
64. Promote the attainment of the goals and objectives of the teaching profession.
65. Express a professional philosophy relevant to the basic goals of teaching.
66. Evaluate periodically his educational philosophy in relation to that held by a majority of other members of the teaching profession.
67. Exchange observational visits, innovations, and ideas with other teachers.
68. Maintain ethical standards expected of a professional educator.
69. Support professional organizations through membership and attendance at meetings.
70. Serve professional organizations as an officer and/or chairman or member of a committee.
71. Represent the teaching profession as a committee member or delegate to meetings and activities of other professions.
72. Assist teachers who are new in the system to understand the policies and regulations of the school.
73 Work with a team of professional from school and/or community on pertinent school problems.
74. Serve community needs by contributing professional expertise to civic projects.
75. Evaluate his personal and professional and personal abilities and limitations.
76. Select the postion which is keeping with his personal and professional abilities and limitations.
77. Maintain professional certification through enrolling in graduate, extension and in-service education programs.
78. Expand educational background and leadership potential by achieving advanced degrees.
79. Acquire new occupational skills needed to keep pace with technological advancement in his teaching field.
80. Up-date his professional personnel file regularly.

School of Education, University of Pittsburgh. Competencies of Vocational Administrators, Prepared for the Task Force Subcommittee of the Pennsylvania Vocational Teacher Education Advisory Committee, November 1, 1974.

Middle Management

Category: I. Philosophy and Objectives

1. Contribute to development and interpretation of a philosophy of vocational education in terms of its objectives, goals, and purposes and those of general education to provide direction to the total educational program.

2. Develop leadership in developing a broad viewpoint which does not restrict thinking to only one or two conventional narrow areas of vocational education.

3. Utilize and promote in others an adequate working knowledge of the history and development of vocational education through a knowledge of each service area within vocational education.

4. Identify with and support the forces and organizations that tend to raise the standards and practices of vocational education.

Category II: Organization and Administration

5. Assist in the development of and utilize a system by which local policies are considered, adopted, implemented, interpreted, evaluated, and revised when essential to the operation and improvement of school functions.

6. Assist in the interpretation and administration of federal, state, and local policies that govern and regulate the operation of a vocational program.

7. Assist in the development of short-range (one year) and long-range (five years) administrative plans.

8. Review, for educational implications, the federal and state resources and organizations that are authorized to provide training programs for disadvantaged, handicapped, and other persons not included in the regular vocational program.

9. Review and identify appropriate special federal and state funding opportunities.

10. Develop with assistance proposals for special federal and state funding.

11. Develop, direct, and maintain the school's instructional and safety program based on legal requirements and safety standards (Occupational Safety and Health Education Act) pertaining to vocational education.

12. Participate in the development of and implement a communications system with staff, chief school administrators, committees, governing boards, educators in other schools, and students regarding educational goals and purposes, curriculum, attendance, activities, and all other subjects of importance concernigg the educational program.

13. Assist in the development of, maintain, utilize effective techniques of public

relations (e.g. brochures, news releases, meetings, conferences) and communications with participating schools, parents, governing boards, and the public at large to improve the understanding and support of vocational education.

14. Maintain and interpret an organizational structure chart and/or description showing the relationship of positions, individuals, and programs to the organization as a whole.

15. Request and utilize assistance and cooperation of state staff and fellow administrators in promoting, developing, maintaining, and evaluating the vocational program.

16. Administer a records management system which will provide safe and efficient storage for the school's documents and records (e.g. student and personnel records, public information items, etc.).

17. Prepare, with assistance required reports and reports deemed appropriate regarding enrollments, program planning, advisory committees' activities, etc.

18. Administer a system for routing printed materials, mail, information and supplies to those on the staff who need or may find the materials received of interest and value.

19. Assist in the development of and implement a system to maintain up-to-date teachers' and students' handbooks and written operations procedures.

20. Utilize legal counsel for faculty and staff on the legal implications of the teacher/administrator, teacher/supervisor, teacher/teacher, teacher/parent, and teacher/pupil roles.

21. Develop an in-school student lunch program.

Category: III. Instructional Program

22. Develop and maintain an up-to-date rationale which relates specific vocational education instructional activities to the total vocational education program.

23. Develop and direct a short-range and long-range educational program plan for students which will provide vocational instruction in accordance with established goals, policies, regulations, and standards.

24. Prepare and submit specific recommendations for major course and/or program changes to appropriate committees or governing board.

25. Assist in identifying specific legal implications affecting vocational students in hazardous occupations.

26. Administer the development, maintenance and revision of courses of study, an instructional resource center and instructional software and hardware to implement the total instructional program.

27. Review and analyze the job market, student interests, initial cost, and ongoing cost related to existing or proposed specialized vocational programs.

28. Recommend and administer the work of outside curriculum specialists for assistance in developing curriculum.

29. Assist in identifying members for and administer appropriate service area (craft) advisory committees to assist in determining curriculum content.

30. Develop and monitor a system for evaluation of the quality of instructions.

31. Develop and administer a realistic, flexible, and workable schedule of course offerings.

32. Develop and direct the utilization of specific performance standards for all occupational areas.

33. Develop a grading system compatible with or convertible to the grading systems used by participating schools.

34. Prepare agreements with community sources for providing additional program opportunities.

Category: IV. Physical Facilities

35. Assist in determinnng the specific needs for adequate and appropriate facilities to operate an effective and efficient educational program.

36. Prepare recommendations for essential changes and alterations of the physical facilities to provide improvement or expansion of the instructional program.

37. Assist in developing a plan to acquire the needed facilities to operate an effective and efficient educational program.

38. Prepare, with others, recommendations for new and different types of equipment to keep the instructional program compatible with the needs of business and industry.

39. Identify external vocational education facilities to accommodate expanded enrollments and technological advancements related to the vocational program.

40. Assist in procuring when available, surplus equipment, tools, and supplies from state and federal dispersal centers.

41. Develop and administer a program to provide regular inspections throughout the school, including instructional areas, to locate hazardous conditions and take those steps needed to correct unsafe conditions.

42. Assist in the development of a security to protect the school building and equipment from damage and theft.

43. Develop and supervise a system for receiving, storing, and distributing all supplies and materials.

44. Assist in the development of the policy to regulate the use of the school building and facilities by outside groups and individuals.

45. Develop work loads for buildings and grounds maintenance and custodial staff.

Category: V. Financial Planning and Management

46. Develop, with the assistance of selected staff members, the fiscal operating budget in line with approved program planning and established priorities.

47. Establish, maintain, supervise an acceptable accounting system, providing for checks and balances and audits, for the control of all appropriated school monies in line with the approved state accounting manual.

48. Assist in developing and implement a fiscal management procedure for acquiring operational funds through taxation, advance payments, vouchers, and reimbursements.

49. Assist in developing and implement a program of investments and interest-bearing accounts for inactive funds.

50. Prepare periodic reports to the governing board and appropriate operating committees relative to the financial status of the school.

51. Establish and maintain a perpetual inventory system to accurately account for equipment, tools, supplies, and materials.

52. Supervise the administrative details of the appropriate insurance programs carried by the school and the insurance program which will be offered to students as school insurance.

53. Implement a system for approving travel expenses for members of the staff.

54. Prepare and maintain a schedule of charges to be made for school-produced items and for services rendered.

55. Assist in the development of and implement a procedure for establishing priorities for the use of funds and other available resources.

56. Assist in determining the appropriate criteria for writing specifications for the purchase of equipment, tools, and supplies in accordance with the school code.

57. Keep informed of and comply with the regulations regarding the use of bids in the purchase of equipment, supplies, and services.

58. Prepare specifications for the purchase of equipment, tools, and supplies.

59. Prepare appropriate recommendations to the authorized purchasing agent for purchase.

60. Assist in preparation of long-range projections of needs for facilities, equipment, and supplies and financing of existing and emerging vocational educational programs.

61. Assist with the preparation of materials for and promotion of passage of bond issues affecting the vocational education programs.

Category: VI. Staff Personnel

62. Assist in determining the number of professional and nonprofessional support persons which are required for the efficient and economical operations of the school.

63. Develop, with the assistance of those concerned, and supervise the implementation of, position descriptions specifying the duties and responsibilities for persons filling each of the established positions.

64. Assist in developing and implement a system for recommending and selecting staff members by: (a) developing selection criteria, (b) using effective interview skills, and (c) effectively communicating recommendations.

65. Implement a checking system that all faculty and staff personnel hold valid certification.

66. Develop and implement an induction and orientation program for all new personnel.

67. Assist in maintaining a record of special assignments delegated to members of the faculty so as to eliminate overloading of some persons.

68. Participate as a recognized leader and advisor in the field of occupational education within the school and the community.

69. Develop, maintain, and promote good human relationships in all dealings with the staff and student body and holding inviolate personal business and political information.

70. Develop, maintain, and promote an active and professional relationship with state, county, local educators.

71. Participate as the liaison representative between the vocational school or department and all participating schools.

72. Assist in developing and utilize an equitable and sound salary structure for professional and nonprofessional personnel.

73. Assist in developing sound, fair, and reasonable personnel policies including those referred to as "fringe benefits."

74. Assist in developing and implement a plan to involve individuals in making decisions which affect them.

75. Assist in developing, utilizing, evaluating the procedure by which members of the staff can have a fair and impartial discussion of their problems, complaints, and grievances.

76. Assist in maintaining a confidential personnel record system for all members of the staff.

77. Determine and administer a roster of substitute teachers.

78. Provide leadership to develop solidarity of purpose within the staff.

79. Assist in planning and directing and participate in staff meetings that have purpose and offer a challenge to members of the staff.

80. Assist in developing, and participate in an in-service education plan related to the recognized needs of the teaching and administrative staffs including provisions for upward mobility.

81. Participate as host and/or provide escorts for individuals or groups that visit the school.

82. Develop and promote communication and professional relationships with local private and proprietary schools.

Category: VII. Student Personnel

83. Assist in determining the basis for determing the number of students that can be accommodated in the total program.

84. Develop, administer, and interpret policies and procedures, in cooperation with the participating schools, for the selection, orientation and registration of students in response to community changes for entrance into the vocational program.

85. Develop and direct with participating schools, procedures for determining and coordinating compulsory attendance and keeping of attendance records.

86. Establish a comprehensive guidance program within the school and in cooperation with participating schools including placement and follow-up of all students, graduates and early school learners.

87. Participate, when appropriate, in counseling with students and parents.

88. Plan and administer a school transportation system, where applicable.

89. Administer the medical service program that is maintained for the welfare of the students.

90. Develop a program of student government.

91. Approve and administer essential supervision of student social, recreational, and athletic activities including vocational youth organizations, when these are a recognized part of the vocational program.

92. Develop, with assistance of other staff members, and administer a system for handling discipline cases that have been referred by members of the staff to the administration.

Meyer, Warren F., Crawford, Lucy, and Klaurens, Mary K. Coordination in Cooperative Vocational Education.

Columbus, Ohio; Charles E. Merrill, 1975.

PERFORMANCE REQUIREMENTS FOR TEACHER-COORDINATORS

1. PROGRAM PLANNING, DEVELOPMENT AND EVALUATION (10 Clusters)

Clusters	Performance Elements
A. Vocational Survey (11 elements)	1. Solicit assistance of vocational education personnel from the state department and/or university in conducting a vocational education survey. 2. Obtain administrative approval for conducting a vocational education survey. 3. Organize a steering committee to assist in pre-planning activities of the vocational education survey. 4. Publicize the purposes and objectives of the vocational education survey. 5. Involve advisory committee in conducting a vocational education survey. 6. Identify the geographical area in which a vocational education survey will be conducted. 7. Devise a plan of activities for the survey staff to follow in conducting vocational education survey. 8. Establish communication with employer representatives who will be involved in vocational education survey. 9. Orient the survey staff to their duties and responsibilities in collecting vocational education data. 10. Suggest a vocational education program based on analysis of community survey. 11. Disseminate the feelings of the vocational education survey.
B. Survey Preparation (3 elements)	12. Adapt an existing vocational education survey form to local needs. 13. Recruit teachers and guidance counselors to participate in conducting a vocational education survey.

B. (cont'd)

14. Direct students in the collection of data for a vocational education survey.

C. Consultation for Survey (3 elements)

15. Consult the local office of the U.S. Employment Service to obtain information on man-power trends and needs.
16. Consult Chamber of Commerce to identify area employers to be contacted in vocational education survey.
17. Persuade labor representatives to participate in vocational education survey.

D. Administrative Approval of Advisory Committee (2 elements)

18. Obtain school board authorization for organizing an advisory committee.
19. Obtain administrative approval of the selected advisory committee members.

E. Advisory Committee (9 elements)

20. Identify the role and function of the advisory committee.
21. Establish the criteria for selection of advisory committee members.
22. Publicize the establishment of the advisory committee, its members and its function to the school community.
23. Orient advisory committee members to their role and function.
24. Plan the annual agenda to be considered by the advisory committee.
25. Serve as secretary to advisory committee.
26. Communicate the date, place, and agenda for advisory committee meetings to all persons concerned.
27. Invite resource persons who can provide consultation service to attend advisory committee meetings.
28. Serve as liaison for the advisory committee and the school administration.

F. Occupational Selection (4 elements)

29. Determine the occupations for which training is to be offered in the vocational education program.
30. Collect student occupational interest data to identify vocational education needs.
31. Identify the competencies needed for entry into an occupation.
32. Describe the occupational standards of performance for each task in an occupation.

G. Utilization of Advisory Committee and Labor for Occupational Analysis (2 elements)

33. Consult advisory committee in regard to planning an analysis of an occupation.
34. Analyze occupations with assistance of employers and labor representatives.

H. Follow-up of Graduates (2 elements)

35. Maintain continual follow-up information on placement, employment and training status of each graduate of the vocational program.
36. Obtain follow-up data from employers of vocational education students.

I. Planning and Evaluation of Vocational Education Programs (10 elements)

37. Assist in the identification of the vocational education purpose and objectives for the school.
38. Determine the reasons students drop out of the vocational program.
39. Identify knowledge and attitudes required for the performance of each occupational task included in a course.
40. Develop vocational courses by clustering and sequencing related tasks.
41. Assist in writing general objectives for courses offered in the vocational education program.
42. Write student performance goals for vocational education courses.
43. Review supervisory evaluation reports for assessing the vocational program.
44. Assess the relevancy of the vocational program.
45. Assess the adequacy of the vocational education facilities and equipment relative to technological change.
46. Disseminate a summary of the vocational education evaluation to administrators, advisory committee members, and the board of education.

J. Long-Range Planning (6 elements)

47. Assist in preparing the long-range program plan for vocational education in the school.
48. Consult advisory committee in developing a long-range program for vocational education.
49. Analyze long-range course needs for the vocational education program.
50. Identify long-range needs for employing faculty for the vocational program.
51. Specify long-range facility, equipment and supply needs for the vocational education program.
52. Prepare a long-range budget which identifies the financial needs of the vocational education program.

II. INSTRUCTION PLANNING
(7 Clusters)

Clusters	Performance Elements
K. Objectives and Performance Goals (3 elements)	53. Review general objectives for the program.
	54. Review student performance goals developed for the program plan.
	55. Sequence performance goals (objectives) for a course.
L. Student Involvement in Unit Planning (1 element)	56. Involve the students in the planning of a unit.
M. Unit Planning (5 elements)	57. Determine objectives for a unit.
	58. Identify the unit topics for a course.
	59. Write content outline for a unit.
	60. Identify lesson topics for a unit.
	61. Select methods of evaluating students performance throughout a unit.
N. Unit Plans for Individualized Instruction (2 elements)	62. Correlate unit content with on-the-job and/or laboratory experiences.
	63. Determine group and individual learning experiences for the unit based on individual differences of students.
O. Preparation of Instructional Materials (3 elements)	64. Prepare instructional materials with a spirit duplicator.
	65. Prepare instructional materials with a mimeograph machine.
	66. Prepare instructional (hard copy and transparency) materials with a photocopier.
P. Instructional Materials, Equipment and Supplies (5 elements)	67. Develop original instructional materials such as individualized related assignment sheets, transparencies, charts.
	68. Write programmed instruction.
	69. Obtain textbook, reference and other instructional material.
	70. Assemble consumable supplies for instructional purposes.
	71. Select tools and equipment for a lesson.
Q. Lesson Planning (8 elements)	72. Identify the specific objectives for a lesson.
	73. Plan the content of a lesson.
	74. Plan the introduction of a lesson.
	75. Plan the summary of a lesson.

Q. (cont'd)	76. Plan student learning experiences for a lesson.
	77. Select teaching techniques for a lesson.
	78. Write a lesson plan.
	79. Select a method of evaluating students attainment of lesson objectives.

III. INSTRUCTION EXECUTION
(13 Clusters)

Clusters	Performance Elements
R. Introduction and Closure of Lesson (2 elements)	80. Introduce a lesson.
	81. Obtain summary for a lesson.
S. Teacher Centered Technique (5 elements)	82. Give an assignment.
	83. Present information with aid of chalk board.
	84. Employ oral questioning techniques.
	85. Give a lecture.
	86. Give an illustrated talk.
T. Teaching Techniques (7 elements)	87. Apply non-verbal techniques such as gestures, facial expressions and silence.
	88. Establish frames of reference to enable the student to understand a situation from several points of view.
	89. Acknowledge student verbal and non-verbal cues.
	90. Employ reward techniques.
	91. Present information with analogies.
	92. Present information through case study problems.
	93. Direct students in applying problem-solving techniques.
U. Traditional Educational Technology (2 elements)	94. Present information with silent motion pictures.
	95. Present information with radio.
V. Educational Technology (8 elements)	96. Present information with phonograph records.
	97. Present information with audio tape recorder.
	98. Present information with overhead projector.
	99. Present information with slides.
	100. Present information with an opaque projector.
	101. Present information with filmstrips.

V. (cont'd)	102. Present information with sound motion pictures. 103. Present information with single concept films.
W. Visual Aids (5 elements)	104. Present information with bulletin boards. 105. Present information with exhibits. 106. Present information with aid of a flip chart. 107. Present information with aid of a flannel board. 108. Illustrate with models and real objects.
X. Directed Study (2 elements)	109. Direct study of textbooks, bulletins, and pamphlets. 110. Direct student study of information and assignment sheets.
Y. Individualized Instruction (3 elements)	111. Present information by the use of individualized instruction. 112. Enrich instruction to challenge the abilities of the abler student. 113. Provide remedial work for slower students.
Z. Laboratory Instruction (6 elements)	114. Demonstrate a manipulative skill. 115. Present a concept or principle through a demonstration. 116. Direct student laboratory experience. 117. Guide student progress through use of operation and/or job sheets. 118. Direct student preparing laboratory work or job plans. 119. Present information by the project method.
AA. Interaction Techniques (11 elements)	120. Lead group discussions. 121. Conduct group supervised study. 122. Present information used in a prepared skit. 123. Employ question box technique. 124. Conduct panel discussions. 125. Conduct symposiums. 126. Conduct debates. 127. Conduct buzz groups. 128. Conduct brainstorming sessions. 129. Employ role-playing techniques. 130. Direct the use of simulation material.
BB. Instruction by Students (2 elements)	131. Direct student presentations. 132. Direct students in instructing other students.
CC. Outside Resources (3 elements)	133. Present information with the assistance of a resource person. 134. Conduct field trips.

CC.	(cont'd)	135. Direct students in gathering information from sources in the community.
DD.	Educational Innovations (6 elements)	136. Direct written programmed instruction.
		137. Direct teaching machine programmed instruction.
		138. Present information by computer-assisted instruction.
		139. Present information with educational television programs.
		140. Present information with videotape recorder or closed circuit television.
		141. Present information through team teaching.

IV. INSTRUCTION-EVALUATION (8 clusters)

EE.	Student Performance Criteria and Evaluation (7 elements)	142. Formulate a system of grading consistent with school policy.
		143. Establish criteria for student performance
		144. Consider cumulative data on students' ability and achievement in establishing performance standards.
		145. Administer subject matter standardized tests.
		146. Appraise students performance in relation to instructional goals.
		147. Appraise students products according to performance standards of the occupation.
		148. Determine grade for performance for on-the-job and related instruction.
FF.	Student Involvement in Evaluation (5 elements)	149. Devise self-evaluation techniques for use by students.
		150. Arrange for students to evaluate their own progress.
		151. Formulate, cooperatively with students, procedures which provide for their participation in the evaluation of instruction.
		152. Engage in cooperative evaluation of achievement with students.
		153. Interpret students evaluation of instruction.
GG.	Evaluation of On-the-Job Experiences (3 elements)	154. Evaluate student learner's personal
		155. Evaluate student learner's work qualities and habits on the job.
		156. Check student learner's progress in acquiring skills on the job.

HH. Laboratory Tests and Rating Sheets (2 elements)	157.	Devise laboratory performance rating sheets.
	158.	Devise laboratory performance rating tests.
II. Formulation of Test Items (6 elements)	159.	Formulate true-false items.
	160.	Formulate multiple-choice test items.
	161.	Formulate matching test items.
	162.	Formulate completion test items.
	163.	Formulate essay test items.
	164.	Formulate test items for an oral examination.
JJ. Administration and Analysis of Tests (4 elements)	165.	Administer teacher-made tests.
	166.	Analyze tests for validity.
	167.	Analyze tests for reliability.
	168.	Devise case study problems.
KK. Evaluating Instruction (3 elements)	169.	Review student progress and/or achievement records to assess effectiveness of instruction.
	170.	Evaluate quality of on-the-job training received by the student-learner.
	171.	Evaluate individualized related assignments completed under directed study.
LL. Teacher Self-Evaluation (2 elements)	172.	Seek opportunities for self-evaluation of instruction through self-rating devices and instructional media such as video or audio recording.
	173.	Obtain information from fellow teachers supervisory personnel regarding the quality of his instruction.

V. MANAGEMENT
(7 clusters)

MM. Budgeting and Supplies (7 elements)	174.	Plan an operating budget proposal for consumable supplies, services and materials needed in a vocational course.
	175.	Design a procedure for acquiring the consumable supplies and materials needed in a vocational course.
	176.	Prepare purchase requests for approved vocational supplies and equipment.
	177.	Arrange for the storage and security of vocational supplies and equipment.
	178.	Prepare a budget for estimated travel expenses incurred in vocational activities.
	179.	Prepare a capital outlay budget proposal for new equipment needed in a vocational course.

MM. (cont'd)	180. Arrange for additional vocational facilities to accommodate expanded enrollments and technological advancements in a course.
NN. Fees and Gratuities (2 elements)	181. Devise a system for determining and collecting student fees for consumable supplies. 182. Accept gifts or donations of supplies and equipment for the vocational program according to school policy.
OO. Reference Books and Supplies (3 elements)	183. Identify new tools and equipment in a vocational course for the academic year. 184. Compile a list of supplies needed for the academic year. 185. Recommend reference books and periodicals related to vocational education that should be added to the library.
PP. Data and Records (8 elements)	186. Structure a filing system for records and report forms used in a vocational course. 187. Record vocational student attendance according to school policy. 188. Record vocational students grades according to school policy. 189. Assemble student file documenting personal habits, attitudes and grades. 190. Maintain a record of individual work hours, wages, and work progression of on-the-job training. 191. Devise a system for maintaining occupational information and opportunity data 192. Devise a filing system for instructional materials. 193. Supply administrators with data for vocational reports required by the state department of education.
QQ. Laboratory Management (9 elements)	194. Arrange layout of vocational laboratory to simulate occupational environment. 195. Arrange laboratory work areas and storage space to facilitate student work performance. 196. Maintain an inventory of vocational tools, supplies, and equipment assigned to the laboratory. 197. Implement student "check out" procedures for tools, supplies, and equipment used in vocational laboratory. 198. Schedule laboratory equipment for maximum utilization by students.

QQ. (cont'd)	199. Direct students in a system for cleaning and maintaining the vocational laboratory.
	200. Establish a system for repairing and servicing tools and equipment in a vocational laboratory.
	201. Control, heat, light, and ventilation in vocational laboratories, and classrooms.
	202. Establish a policy for use of the physical facilities by outside groups and other school personnel.
RR. Safety Measures (3 elements)	203. Provide approved safety apparel and devices for vocational students assigned to hazardous equipment.
	204. Establish a procedure for attending first aid needs of vocational students.
	205. Maintain a record of safety instruction presented in compliance with safety laws and regulations.
SS. Student Behavior (6 elements)	206. Uphold school standards of expected student behavior.
	207. Uphold acceptable standards of student behavior in vocational classrooms and laboratories.
	208. Formulate with students acceptable standards of behavior in vocational classrooms and laboratories.
	209. Encourage students to excerise self-discipline.
	210. Carry out approved disciplinary action when warranted.
	211. Control outbursts of fighting and aggressive behavior.

VI. GUIDANCE
(7 clusters)

TT. Teacher-Student Rapport (3 elements)	212. Maintain an open-door policy for student consultation.
	213. Demonstrate a regard for and an interest in the students as individuals.
	214. Encourage students to discuss career aspirations.
UU. Personal Concern for Student (4 elements)	215. Demonstrate personal concern for the student and his family.
	216. Conduct home visits.
	217. Communicate with prospective and continuing students during the summer.

UU. (cont'd)

218. Assist students with their problems by working cooperatively with agencies such as the health and welfare services.

VV. Student Records
(5 elements)

219. Determine students background and environment.
220. Review students autobiographies for information aid in understanding the students.
221. Analyze students cumulative records.
222. Determine relationships among students through sociometric techniques, (e.g., sociogram).
223. Maintain anecdotal records on students.

WW. Adminstering Standardized Tests
(4 elements)

224. Administer subject matter diagnostic tests.
225. Arrange with the guidance counselor for administration and interpretation for personality, aptitude and intelligence tests for specific students.
226. Arrange for local office of the U.S. Employment Service to administer and to interpret the General Aptitude Test Battery.
227. Interpret occupational tests and inventories to students.

XX. Student Counseling
(6 elements)

228. Conduct group counseling sessions.
229. Recognize potential problems of students.
230. Conduct a conference for counseling a student.
231. Encourage two-way communication during a conference with a student.
232. Assist students in developing good study habits.
233. Confer with student and his parents regarding the student's educational development.

YY. Occupational Counseling
(7 elements)

234. Present information to students on occupational opportunities.
235. Assist students in determining ways to best describe their salable skills.
236. Assist students in securing and in filling out applications for jobs, scholarships, educational loans or college admission.
237. Write letters of recommendation for students.
238. Assist graduates or seniors in preparing for interviews with potential employers.

YY. (cont'd)	239. Present information to students on post-high school training and educational opportunities available to them.
	240. Develop constructive working relationships among students.
ZZ. Student Referral (5 elements)	241. Establish communication patterns for exchanging information for cooperating with the guidance counselor.
	242. Supply guidance counselor with performance data about students.
	243. Refer students to guidance counselor and other specialists.
	244. Work with other teachers to help students with individual problems.
	245. Refer students to qualified personnel agencies for occupational and educational information.

VII. SCHOOL-COMMUNITY RELATIONS
(7 Clusters)

Planning School-Community Relations (3 elements)	246. Assist in the development of policies regarding school-community relationships.
	247. Plan the school-community relations activities for the vocational program.
	248. Procure clearance from the school administration to conduct school-community relations activities related to the vocational program.
Feedback on Vocational Programs (8 elements)	249. Obtain informal feedback on the vocational program through contacts with individuals in the school and community.
	250. Consult advisory committee to obtain information concerning their expectations of the vocational program.
	251. Acquire information from members of the community power structure (e.g., political, social, economic pressure groups) regarding their expectations of the vocational program.
	252. Obtain information from parents relative to their expectations of the vocational program.
	253. Analyze enrollment trends to determine student and parent acceptance of the vocational program.
	254. Study in-school election results (student council, class officers) to determine the image of the vocational students in the school.

	255.	Study community voting results on financial issues affecting the vocational program to determine community support of the program.
	256.	Conduct opinion surveys in the school and community concerning the vocational program.
School and Community Service (6 elements)	257.	Assist in planning the overall objectives of the total school program.
	258.	Provide consultant services to local business and industry.
	259.	Assist with community business and industry sponsored services.
	260.	Serve in a community civic, service or social organization to improve the image of the vocational program.
	261.	Serve in professional non-vocational organizations to improve the image of the vocational program.
	262.	Assist with special community social events.
Student-School-Community Activities (3 elements)	263.	Conduct an open house to familiarize members of the school and community with activities of the vocational program.
	264.	Sponsor student-parent activities for the vocational program.
	265.	Sponsor employer-student banquet for the vocational program.
Unions (Labor and Management) (1 element)	266.	Maintain liaison with union officials and employers.
Staff Relationships (3 elements)	267.	Express a philosophy consistent with that of the vocational staff.
	268.	Maintain working relationships with the faculty and administration.
	269.	Maintain working relationships with the school supporting staff through cooperation and mutual effort.
Program Publicity (7 elements)	270.	Provide brochures to inform the school and community of the vocational program.
	271.	Provide displays in the school and in the community on the vocational program.
	272.	Speak to school and community groups on the vocational program.
	273.	Direct student presentations describing activities of the vocational program.

274. Prepare news releases on activities of the vocational program for newspapers and other periodicals.
275. Present activities of the vocational program on radio.
276. Present activities of the vocational program on television.

VIII. STUDENT VOCATIONAL ORGANIZATION (5 clusters)

Establishing Student Vocational Organization
(4 elements)

277. Obtain approval from school administration for establishing a student vocational organization.
278. Contact state leadership regarding the steps to be followed in organizing a student vocational organization.
279. Organize a student committee to assess the interest of students in joining a vocational organization.
280. Acquaint prospective members and their parents with the purposes, activities, and values of the student vocational organization.

Management of Student Vocational Organization
(15 elements)

281. Conduct an organizational meeting for a student vocational organization.
282. Orient students to the student vocational organization.
283. Assist in the election and installation of officers of the student vocational organization.
284. Conduct leadership training sessions for the officers of the student vocational organization.
285. Assist students in developing a yearly program of activities for the student vocational organization.
286. Design a procedure for acquiring consumable supplies and materials needed in a vocational organization.
287. Assist students with the financial management of the student vocational organization.
288. Assist in planning and organizing fund raising activities for the student vocational organization.
289. Coordinate student vocational organization activities with instructional activities.
290. Supervise social and educational activities for the student vocational organization.

291. Maintain student vocational organization as integral part of the instructional vocational education program.
292. Assist students with the publicizing of the student vocational organization activities.
293. Direct initiation activities of the student vocational organizations.
294. Assist students in advancing within the available degrees in the student vocational organization.
295. Involve students in the evaluation of the student vocational organization.

Cooperation with State and National Organizations (7 elements)

296. Affiliate the student vocational organization with the state and national vocational organizations.
297. Send student representatives to district, state, regional and national student vocational organization activities.
298. Provide advice and training for student entries in state and national student vocational organization contests.
299. Participate in district, state, regional and national activities of the student vocational organization.
300. Assist in the development of rules and procedures for conducting state, regional, and national student vocational organization contests.
301. Serve as an advisor or judge for district, state, regional, and national student vocational organization contests.
302. Assist in the preparation of state and national reports for the student vocational organization.

Books and Publications (3 elements)

303. Maintain a file of publications available for the student vocational organization.
304. Supervise the development of a chapter scrapbook for the student vocational organization.
305. Supervise the development of an annual handbook for the student vocational organization.

Chapter Parents (1 element)

306. Involve elected chapter parents in the activities of the student vocational organization.

IX. PROFESSIONAL ROLE AND DEVELOPMENT
(7 clusters

Philosophy and Goals (6 elements)	307.	Express a professional philosophy relevant to the basic goals of teaching.
	308.	Promote the attainment of the goals and objectives of the teaching profession.
	309.	Maintain ethical standards expected of a professional educator.
	310.	Identify current trends of the teaching profession.
	311.	Exchange observational visits, innovations, and ideas with other teachers.
	312.	Evaluate periodically his educational philosophy in relation to that held by majority of other members of the teaching profession.
General School Duties (2 elements)	313.	Participate in noninstructional school duties, i.e., cafeteria, homeroom, bus duty, chaperoning, PTA.
	314.	Assist with nonvocational student organization activities.
Professional Service (6 elements)	315.	Support professional organizations through membership and attendance at meetings.
	316.	Serve professional organizations as an officer and/or chairman or member of a committee.
	317.	Represent the teaching profession as a committee member or delegate to meetings and activities of other professions.
	318.	Write an article or book for publication which contributes to the literature of the profession.
	319.	Participate in experimental and other data collecting research activities.
School Problems (2 elements)	320.	Work with a team of professionals from school and/or community on pertinent school problems.
	321.	Assist teachers who are new in the system to understand the policies and regulations of the school.
Student Teaching (8 elements)	322.	Plan activities for the student teacher which draw upon and enrich college course work.

323. Interpret the policies and regulations of the local school district to the student teacher.
324. Provide opportunities for potential teachers to observe and participate in the program.
325. Assign responsibilities to the student teacher commensurate with his or her background of knowledge and experience.
326. Demonstrate pedagogical skills to student teachers.
327. Consult regularly with the student teacher regarding planning execution and evaluation of teaching.
328. Confer with college supervisor and student teacher regarding performance in the student teaching situation.
329. Confer with college supervisor and student teacher regarding plans for an evaluation of the total student teaching experience.

Self-Evaluation
(3 elements)

330. Select the position which is in keeping with personal and professional abilities and limitations.
331. Use a self-analysis form to evaluate personal and professional abilities and limitations.
332. Consult supervisory and administrative evaluations to determine attitudes of others toward personal and professional abilities and limitations.

Updating Competencies
(4 elements)

333. Acquire new occupational skills needed to keep pace with technological advancement in teaching.
334. Maintain professional certification through enrolling in graduate, extension and inservice education.
335. Expand educational background and leadership potential by achieving advanced degrees.
336. Upgrade professional personnel file regularly.

X. COORDINATION
(11 clusters)

Resource Material
(1 element)

337. Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.

Student-Learner Selection
(7 elements)

338. Establish criteria for selection of student learners.
339. Gather student-learner selection data (e.g., test results, records, grades).
340. Administer occupational tests relative to student-learner selection and placement.
341. Interview students and parents to obtain student-learner interest and aptitude information.
342. Identify a prospective student-learner on a basis of selection criteria and data.
343. Match a student-learner's unique characteristics with an appropriate training station.
344. Approve on-the-job training hours and wages for student-learner.

Training Station
(3 elements)

345. Establish criteria for evaluating training station potential of an employer.
346. Identify prospective cooperating employers to provide on-the-job training stations.
347. Assess educational adequacy of a prospective trainins station's facilities and equipment.

Union
(1 element)

348. Arrange with a union to make contact provision for student-learner.

Employment Regulations
(Federal and State)
(5 elements)

349. Determine federal and state wage and hour classification of a prospective cooperating employer.
350. Assist cooperating employer in acquiring federal permit to pay a training wage.
351. Establish a cooperating employer's qualifications for reimbursement for training a student-learner.
352. Obtain reimbursement for cooperating employer providing on-the-job training.
353. Obtain reimbursement for student-learners for training costs such as clothing and tools.

Safety
(3 elements)

354. Develop a procedure to insure students safety and protection in the training station.
355. Assess safety provisions of facilities and equipment of the prospective training station.
356. Assist coo

356. Assist cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation.

Persuasion
(1 element)

357. Convince an employer to provide a training station for cooperative education.

Training Agreement
(4 Elements)

358. Develop a cooperative training agreement between student-learner parents, school and cooperating employer.
359. Arrange school and work schedules with student-learners, faculty, and training station personnel.
360. Develop a plan for teacher-coordinator supervision of on-the-job training.
361. Develop systematic training plan with the on-the-job instructor.

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SUPERVISORY FUNCTIONS (competencies)

1. Direct and coordinate the total vocational education program for which he is responsible at the local level.
2. Provide leadership and assistance in the development of the best possible curriculum for the students being served.
3. Provide leadership and assistance in the improvement of teaching technique.
4. Assist with the recruitment, selection and orientation of instructional staff personnel and in the development of appropriate in-service training activities.
5. Assist the instructional staff with the selection of teaching materials, equipment and supplies.
6. Work in close cooperation with local administrative personnel to coordinate and improve the total educational program.
7. Provide leadership and assistance in local research endeavors in identifying vocational education needs and improving the instructional programs.
8. Assist each teacher in planning a budget which will provide the necessary equipment, supplies and materials for an effective educational program.
9. Be a functioning part of an effective public information program and maintain, as an individual, desirable public relations with all concerned.
10. Cooperate with guidance personnel in providing for effective guidance and counseling techniques in the testing, placement and follow-up of vocational students.
11. Evaluate continuously the total vocational education program with the administration and staff in terms of stated objectives so that improved instructional procedures will result.
12. Assist the teacher in developing an understanding of student evaluation and an effective student evaluation program.
13. Promote a team effort with all other vocational education agencies represented within the community.
14. Develop annual and five-year plans for a complete vocational education program.
15. Participate in and encourage teacher support of district, state and national vocational education professional organizations.

LOCAL SUPERVISOR's OBLIGATION TO:

16. Keep the teaching staff informed of policies and projected plans through group meetings and personal conferences.
17. Accord all teachers the same degree of consideration and understanding.
18. Get to know each teacher in order to be aware of the teacher's strong points as well as his needs.
19. Offer assistance and encouragement where they are needed.
20. Give commendation where it is earned.

IN PROGRAM ADMINISTRATION THE LOCAL SUPERVISOR WOULD BE RESPONSIBLE FOR:

21. Working in cooperation with the curriculum advisory committee or the administration in implementing new programs and updating existing ones.
22. Coordinating and preparing courses of study and delineating and supplementing content to meet the needs of the program.
23. Working with teachers in developing programs and informing all teachers of the program operation.

GUIDANCE PRACTICES MAY INCLUDE THE PROMOTING OF THE FOLLOWING ACTIVITIES:

24. Use of consultant services.
25. Use of guidance records to give an accurate account of each student's past performance.
26. Use of career information for job guidance.
27. Orientation of pupils entering the vocational program.
28. Evaluation of all program goals by teachers and supervisors.
29. A planned program for placement of students.
30. Assistance in planning job opportunities.
31. Cooperation with the existing employment agencies.
32. The development and conscientious use of suitable follow-up survey forms to determine student success on the job.

Behavioral Competency Study, Temple University, Philadelphia, Pennsylvania. Unpublished draft, 1975.

SUPERVISOR OF VOCATIONAL EDUCATION

ADMISSION CRITERIA

1. Completion of five years of satisfactory professional experience in the areas in which the supervisory certificate is sought.
2. A master's degree with emphasis in a subject or teaching area (except that for a Supervisor of Vocational Education - Trade and Industrial Education certificate a Baccalaureate degree is sufficient).

SOCIAL CONCERNS

3. Cooperate with all types of labor, business, trade, agricultural, management, and manpower agencies in the community.
4. Translate community and manpower needs into meaningful vocational instruction.
5. Assist in preparation of annual and long-range goals of programs.
6. Work cooperatively with persons and groups in developing a total educational program.
7. Utilize an advisory council for the vocational program.
8. Assist in determining departmental aims.
9. Hold membership in civic and professional organizations.
10. Serve on community committees.
11. Serve community needs by contributing professional expertise to community activities.
12. Plan, develop, and conduct a community survey and analyze data.
13. Plan, develop, and conduct a follow-up study and analyze data.
14. Participate in job placement service for students.
15. Recognize accreditation agencies influence on teacher qualification.
16. Establish a strong three-way relationship between the student, the school, business, and industry.

NEW DEVELOPMENTS

17. Keep up-to-date on new occupational materials, methods and media.
18. Belong to professional educational association.
19. Attend state professional meetings.
20. Maintain contact with employment agencies.
21. Attend conferences and workshops.
22. Read extensively in professional literature.
23. Direct research projects for improving programs.
24. Review and report relevant research to staff.
25. Identify current trends of the teaching profession.
26. Explore the availability of instructional materials for establishing new courses to meet the changing conditions in industry.
27. Exchange observational visits, innovations, and ideas with others in the profession.

28. Acquire new occupational skills and information needed to keep pace with technological advancement in vocational education.
29. Identify qualifications required for entry into specific occupations.
30. Identify latest trends in business and industry.

CURRICULUM DEVELOPMENT

31. Consult with curriculum specialists for guidance and assistance in developing a curriculum having substance and merit.
32. Consult with advisory committees to determine curriculum content and method of presentation.
33. Develop a curriculum which conforms to all regulatory standards and is designed to meet the needs of students and prospective employees.
34. Complete job descriptions and analyze occupations for use in curriculum development.
35. Assist staff in developing courses of study and course outlines.
36. Review and evaluate courses of study with members of the staff to determine the need for revision and improvement.
37. Explain goals and scope of vocational education to school administrators and others.
38. Provide for continuous evaluation of vocational programs.
39. Conduct vocational program evaluation.
40. Identify needed improvements and revisions through vocational education program evaluation.
41. Structure cooperative programs to meet meaningful educational objectives.
42. Develop a realistic and workable program schedule to enable all students to satisfy the course requirements of their respective curriculum.

IMPROVEMENT OF TEACHERS

43. Provide leadership to generate and foster interest and enthusiasm in improving the quality of instruction.
44. Develop and sequence student performance objectives for a course.
45. Determine needs and interests of student enrollees.
46. Plan a unit of instruction.
47. Develop and write a lesson plan.
48. Provide guidance and assistance in developing courses of study, instructional aids, and related materials.
49. Develop graphic materials, educational displays, transparencies, and other real objects for instruction.
50. Organize, direct, and supervise audio-visual programs for all course offerings.
51. Organize and develop a system to secure and provide resource materials to the staff.
52. Conduct workshops to develop instructional materials.
53. Conduct symposiums, panels, and group discussions.
54. Demonstrate the effective application of principles and methods of teaching.
55. Hold individual and group conferences to discuss instructional problems.
56. Establish criteria for evaluation of teaching performance.
57. Evaluate instructional effectiveness.
58. Evaluate techniques used by vocational staff in the classroom.
59. Utilize consultants for improving instruction.
60. Plan and/or conduct in-service training for vocational faculty.

61. Encourage teachers to utilize self-evaluation.
62. Assist in making adjustments based on self-evaluation.
63. Assist in adoption of textbooks or reference books.

SCHOOL SUPERVISION

64. Recognize individual differences in abilities of staff members.
65. Gain teacher's acceptance and confidence concerning the motives of classroom visitation.
66. Develop and supervise an induction and orientation program for all new personnel.
67. Maintain a roster of substitute teachers from which selections can be readily made when their services are required.
68. Organize, direct, and supervize the school safety program.
69. Explain state and federal safety regulations for operation of equipment.
70. Follow fire regulations and fire drills for schools.
71. Plan and organize in-service programs for safety practices.
72. Establish safety standards for the vocational program.
73. Supervise the instructional and custodial staff in operation of safety program.
74. Compile list of sources of assistance in establishing safety standards.
75. Develop and supervise a program to provide regular inspections throughout the school to locate hazardous conditions and take steps needed to correct unsafe conditions.
76. Recognize youth organizations as a means of involving more general educators, business leaders, and parents in the school program.
77. Recognize that youth organizations provide students with opportunity to develop leadership ability, civic, social, and economic awareness and understanding.
78. Provide leadership in organizing and planning youth groups.
79. Involve local business and industry in youth organization activities.
80. Promote and encourage student membership and participation in student organizations such as VICA, FFA, FHA, FBLA, and DECA.
81. Promote and demonstrate good public relations.
82. Serve as host and/or provide escorts for individuals or groups that are visiting the school for a purpose.
83. Plan, direct, and provide essential supervision for student social, recreational, and athletic activities, when these are a recognized part of the vocational program.
84. Identify criteria for effective employer-employee relationships.
85. Recognize the importance of maintaining personal contact with faculty as a means of keeping them informed.
86. Develop an informational system to keep teachers informed.
87. Develop and maintain up-to-date teachers' and students' handbooks.
88. Provide the procedure whereby all bulletin boards are kept orderly and supplied with up-to-date information and notices.
89. Develop and maintain an efficient system to process and handle student records and reports.
90. Counsel and conduct conferences with parents, students, and members of the staff to the administration.
91. Conduct a meeting.
92. Write letters, memos, and bulletins.

APPENDIX D

Competency Lists - Part 4: For Administrative Positions Such As Superintendent - Directors, Assistant Superintendent - Directors, Directors of Vocational Schools, and Directors of Occupational Education

Seven Lists from National Studies

Baltimore........................page 238
Canfield.........................page 242
Holt and Wiegers.................page 244
Norton...........................page 247
University of Pittsburgh.........page 252
Southern Illinois University......page 258
Temple University................page 271

Baltimore, J., *A Study of Professional Education Competencies of Public School District Vocational Education Leaders*. Doctoral thesis, Oregon State University, June 1973.

ADMINISTRATORS OF VOCATIONAL EDUCATION COMPETENCIES

Factor I- Program Management

Subfactor	Competency
Program Development	1. Define the mission of the school.
	2. Develop a rationale for a particular curriculum plan built upon the technological, sociological, philosophical, and psychological bases.
	3. Plan and implement adult occupational education programs.
	4. Specify the data needed for the inputs to the instructional systems. Some examples are: Characteristics of entering students. Characteristics of teachers.
	5. Interpret in writing the data provided in a survey.
	6. Critically read, interpret, evaluate, and analyze the following to determine the need for a given occupational program: a. An occupational survey of the district. Plans to attract industry. b. Manpower reports (state and national) Plans to terminate industries. c. Employment agency information. *Occupational Outlook Handbook* and *Dictionary of Occupational Titles*. d. Advisory Committee recommendations.
	7. Identify the state agencies that effect the school.
Community Relations	8. Prepare articles for specialized and/or mass media.
	9. Set up an in-service plan on the functions, purposes, and activities of an advisory committee for presentation to the vocational education staff.
	10. Develop an advisory committee handbook which explains the role and function of the committee.

Subfactor	Competency
Community Relations (continued)	11. Establish a term of membership and a system of replacing and rotating members of advisory committees.
	12. Establish and maintain effective working relationships with trade, labor, management, agricultural, and manpower organizations.
	13. Identify public relations problems.
	14. Develop and direct a program to improve public relations between the school and the community.
	15. Interpret financial and special needs of vocational education to the public and to the community served.
	16. Contribute to studies, commissions, and investigations sponsored by professional organizations and governmental agencies.
Interpret Legislation	17. Interpret the legal responsibilities of vocational teachers.
	18. Identify and interpret state laws that relate to the school.
	19. Utilize federal, state, and local legislation, regulations, and policies that affect vocational education.
Student Placement	20. Coordinate and supervise cooperative work experience programs.
	21. Specify minimum standards and criteria for the selection and approval of training stations for cooperative programs.
	22. Specify the data needed for the inputs to the instructional systems. Some examples are: Characteristics of students for placement.
Management Techniques	23. Design a vocational administrative organization to facilitate attainment of goals.
	24. Monitor operating characteristics of the vocational administrative unit and make necessary revisions.

Table 4. Factor II - Program Planning, Development, and Evaluation

Subfactor	Competency
Program Development	25. Communicate plans and goals to the instructional staff.
	26. Direct pilot and demonstration projects as exemplary programs.
	27. Develop task analyses for curriculum planning.
	28. Write behavioral objectives.
	29. Write behavioral objectives that include the educational domains of affective, cognitive, and psychomotor.
	30. Specify the data needed for the inputs to the instructional systems. Some examples are: Characteristics of entering students.
Program Evaluation	31. Determine the competencies expected of the classroom teacher in a vocational-technical curriculum.
	32. Determine the measures to be used in evaluating the instructional processes. Some examples are: Student-teacher interactions. Effectiveness of instructional strategies.
	33. Determine the appropriateness of a particular way of assessing a teacher.
	34. Determine the appropriateness of a particular way of assessing a learning problem.
Data Collection & Dissemination	35. Design a feedback and follow-up system to provide evaluation date to the instructional staff.
	36. Schedule and supervise data collection.
	37. Utilize evaluation data in decisions related to curriculum development and revision and the improvement of instruction.
	38. Determine the statistical design to be used in analyzing data.
	39. Develop a plan for a survey which will determine the need for and the interest in a given vocational program.

	40. Describe a plan for sampling a cross-section of a district.
	41. Develop a survey instrument, including letters of transmittal and follow-up.
	42. Interpret in writing the data provided in a survey.
	43. Distribute survey results to the students/teachers/administrators/lay public.
	44. Conduct a meeting, involve members in the discussion, and summarize discussion.

Table 5. Factor III - State Criteria Interpretation

Subfactor	Competency
	45. Interpret the state specifications for vocational education facilities.
	46. Interpret state certification requirements for instructors.
	47. Prepare a project proposal for funding based on State Board of Vocational-Technical and Adult education criteria.

Table 6. Factor IV - Staff Management

Competency
48. Supervise instructional staff
49. Evaluate staff load and balance
50. Schedule courses
51. Motivate staff to achieve their goals and to grow in competence

Table 7. Factor V - Staff Relations

Competency
52. Understand communications, verbal and nonverbal
53. Demonstrate an effective working relationship with the total administrative staff.

Canfield, Albert A., COMPETENCIES FOR ALLIED HEALTH INSTRUCTORS, VTO 19639, ED 074258, University of Florida, Gainesville, Florida, Dec., 1972.

AREA: ADMINISTRATION AND SUPERVISION

1. Identify the character, purposes, and importance of formal and informal organizational structures, including an identification of the roles, obligations, and accountabilities of the personnel involved.

2. Apply principles of management to the organizational unit toward which the education is directed.

3. Conduct a performance evaluation or review emphasizing the contribution of the relationship to the employee's growth and development and to the achievement of objectives.

4. Understand the major categories into which financial accounting is divided and the institutional rationales for such a structure.

5. Identify major sources of funds for the support of developmental and research programs and effective methods for their procurement.

6. Recognize the student's own personal limitations and strengths in dealing with others in typical job related situations, and to develop plans for the strengthening of his ability to function effectively in the educational environment.

AREA: RESEARCH

7. Utilize basic statistical techniques in health related and educational research.

8. Interpret statistics as used in graphs, charts and concise and analytical summaries.

9. Select and utilize appropriate research designs.

10. Identify major sources of research in the subject-matter field and demonstrate the ability to accurately evaluate the research reported.

11. Utilize available resources for statistical, computational, and other research consultation services.

12. Describe how the computer and related data processing services can be utilized in the research process.

13. Maintain an active and continuing interest in professional reading, attendance at meetings, and publications.

AREA: COMMUNITY HEALTH CONCEPTS

14. Understand the concepts of the health team and comprehensive health care as they relate to the needs for and trends in the delivery of health care.

15. Utilize validated techniques to determine community power to structure, demographical factors, and health levels as they relate to community health planning and delivery.

16. Know the methods and trends in the financing of health care.

17. Know the federal, state, and local governmental agencies concerned with health care and the legislation controlling their activities.

18. Describe the roles and functions of specific health professional with whom they will most likely have contact.

19. Knowledge at the post-graduate level in related areas of behavioral, biological, physical, and related sciences.

20. Knowledge at a graduate level in at least one special content area in the selected health field.

21. Maintenance of emotional control with evidence of emotional stability in the clinical setting -- with colleagues, students, patients, family members, and others.

22. Knowledge of specialty principles and practices and the ability to communicate them effectively, in oral and written form, with a variety of individuals and groups.

23. Recording and interpretation of health histories, personal backgrounds, and laboratory measurements for use in patient care.

24. Development of forms and procedures for the accumulation and reporting of educational or clinical data related to the specialty area.

25. Utilization of appropriate required records as related to law and the regulations of the institution within which employed.

Department of Vocational-Technical Education. The University of Tennessee, Knoxville, Tennessee, Research Series Number 1.

THE ROLE OF THE DIRECTOR OF VOCATIONAL EDUCATION AT THE PUBLIC SCHOOL DISTRICT LEVEL IN THE STATE OF TENNESSEE, Raymond A. Holt & George W. Wiegers, Jr. August, 1973.

RANK-ORDER OF THE FUNCTIONS OF THE OVERALL ACTUAL AND IDEAL ROLES AS PERCEIVED BY THE REFERENCE GROUPS

1. Work cooperatively with local, state and federal agencies in developing local vocational programs
2. Provide assistance to school administrators in initiating and operating vocational programs
3. Keep the public informed of the vocational program
4. Promote and demonstrate good public relations
5. Explain goals and scope of vocational education to school administrators and others
6. Plan and prepare the annual vocational budget
7. Translate community and manpower needs into meaningful vocational programs
8. Work cooperatively with persons and groups in developing a total educational program
9. Provide for continuous evaluation of vocational programs
10. Plan and organize orientation for new vocational teachers
11. Assist in design and equipping of new facilities and/or programs
12. Keep up to date on new occupational materials and methods
13. Prepare or assist in preparation of annual and long-range goals of programs
14. Plan and/or conduct in-service for vocational faculty
15. Assist in selection of vocational faculty members
16. Coordinate programs in school district
17. Attend local professional meetings

18.5 Belong to professional educational associations

18.5 Attend state professional meetings

20. Prepare reports for program reimbursement

21. Establish and utilize an advisory council for the total vocational program

22. Request services of state staff and consultants where and when needed

23. Approve budget requisitions for supplies and equipment

24. Maintain contact with employment agencies

25. Promote coordinated program between vocational program and other subject matter areas

26. Establish and maintain relationships with all types of labor, trade, agriculture, management, and manpower agencies in the community

27. Conduct vocational program evaluations

28. Attend conferences and workshops

29. Keep up to date by extensive reading

30. Prepare reports of activities for public information

31. Formulate policies concerning the total vocational program and staff

32. Work closely with teacher education institutions in developing effective programs at the pre-service and in-service levels

33. Make recommendations in all aspects of the development and construction of facilities

34. Hold individual and group conferences to discuss instructional problems

35. Keep adequate records of students, teachers, equipment, and facilities to complete reports

36. Promote staff membership in professional organizations

37. Assist in determining departmental aims

38. Prepare proposals for grants (federal and state)

39. Help establish and maintain safety programs

40. Attend county court or city council meetings in matters relating to vocational education

41. Prepare cost estimates on equipment and facilities

42. Establish inventory procedures

43. Aid in organizing and utilizing occupational advisory committees

44. Keep teachers informed of effective teaching methods

45.5 Serve as ex-officio member of all occupational advisory committees

45.5 Explain federal and state legislation to local educators

47. Serve on professional committees

48. Address community groups

49. Observe vocational staff in classroom

50. Explain world of work to educators and laymen

51. Aid in developing instructional guides

52. Conduct workshops to develop instructional materials

53. Attend civic and other group meetings

54. Hold membership in civic organization(s)

55. Attend national professional meetings

56. Explain federal and state legislation to laymen

57. Compile and distribute lists of instructional materials (subject matter, audio-visual, etc.)

58. Assist in adoption of textbooks or reference books

59. Serve on community committees

60. Inform teachers of current literature

61. Attend school board meetings

62. Direct research projects for improving programs

63. Review and report relevant research to faculty

64. Address local, state and national organizations

65. Encourage teachers to write professional articles

The Center For Vocational Education, Ohio State University, Columbus, Ohio.

Administrator Task Inventory Robert E. Norton, Project Director
(Instrument for work in progress, 1976).

Category A: Program Planning, Development and Evaluation

1. Survey student and parent interests.
2. Collect and analyze manpower needs assessment data.
3. Direct occupational task analysis for use in curriculum development.
4. Direct the identification of entry-level requirements for jobs.
5. Involve community representatives in program planning and development.
6. Obtain state and federal services and resources for program development.
7. Cooperate with district, county, regional, and state agencies in developing and operating vocational programs.
8. Prepare annual program plans.
9. Prepare and update long-range program plans.
10. Develop overall vocational program goals.
11. Coordinate district curriculum development efforts.
12. Approve courses of study.
13. Establish school admission and graduation requirements.
14. Recommend program policies to the administration and board.
15. Implement local board and administrative policies.
16. Interpret and apply state and/or federal vocational education legislation.
17. Interpret and apply other relevant state and federal legislation (such as CETA).
18. Develop plans for evaluating instructional program.
19. Direct self-evaluation of the district vocational programs.
20. Involve external evaluation personnel in assessing program effectiveness.
21. Design and select instruments for evaluating the instructional program.
22. Evaluate the effectiveness of the instructional program.
23. Initiate student and employer follow-up studies.
24. Analyze student and employer follow-up studies.
25. Recommend curriculum revisions based on evaluation data.
26. Assess student testing and grading procedures.
27. Analyze the school and community's feelings toward educational change.
28. Write proposals for the funding of new programs and the improvement of existing programs.
29. Coordinate local demonstration, pilot, and exemplary programs.
30. Design and oversee local research studies.
31. Interpret and use research results for program development and improvement.
32. Develop supplemental/remedial instructional programs to meet student needs.

Category B: Instructional Management

33. Establish instructional program entry and completion requirements.
34. Establish student rules and policies (such as attendance and discipline).
35. Enforce student rules and policies.
36. Design and oversee student progress reporting procedures.
37. Approve student promotions/reassignments.
38. Prepare a master schedule of course offerings.
39. Guide staff in selecting and using effective instructional strategies (such as individualized instruction).
40. Establish and implement a curriculum design that will achieve the school's instructional goals.

41. Guide staff in integrating and articulating the vocational program with the total educational program.
42. Promote the integration of vocational student organizational acitivites into the instructional program.
43. Provide for cooperative education programs.
44. Provide for supplemental/remedial instructional programs.
45. Provide for special needs programs.
46. Provide for adult/continuing education programs.
47. Arrange for students to attend programs offered by other educational agencies.
48. Guide the articulation of secondary and postsecondary vocational program objectives.
49. Approve selection of instructional equipment.
50. Approve selection of instructional materials.
51. Maintain a learning resources center for students.

Category C: Student Services

52. Oversee student recruitment activities.
53. Oversee school admission services.
54. Arrange for student loan and grant programs.
55. Arrange for work study programs.
56. Oversee student guidance and testing services.
57. Oversee student job placement and follow-up services.
58. Oversee extracurricular organizations and activities.
59. Provide for a student record keeping system.
60. Interpret and apply student rights, laws, and regulations.
61. Interpret and apply Veteran's Administration laws and regulations.

Category D: Personnel Management

62. Prepare and recommend personnel policies.
63. Prepare and maintain a personnel handbook.
64. Assess program staffing requirements.
65. Prepare job descriptions.
66. Establish staff and selection and recruitment procedures.
67. Recruit and interview potential staff.
68. Recommend potential staff to the administration and board.
69. Participate in negotiating staff working agreements.
70. Establish staff grievance procedures.
71. Resolve staff grievances and complaints.
72. Interpret the staff benefits program.
73. Counsel and advise staff on professional matters.
74. Schedule staff work loads.
75. Schedule staff leaves, vacations, and sabbaticals.
76. Oversee the work of teachers and other school personnel.
77. Provide for a staff record-keeping system.
78. Plan and conduct staff meetings.
79. Prepare bulletins and other communications designed to keep staff informed.
80. Observe and evaluate staff performance.
81. Recommend staff promotions and dismissals.
82. Provide guidance to the staff on legal matters affecting the school program.
83. Interpret and apply licensing and certification regulations.
84. Interpret and apply labor laws and regulations.
85. Interpret and apply affirmative action laws and regulations.

Category E: Staff Development

86. Assess staff development needs.
87. Assist in the preparation of individual staff profiles.
88. Counsel with staff regarding personnel development needs and activities.
89. Establsih and maintain a staff learning resources center.
90. Conduct workshops and other in-service programs for professional personnel.
91. Arrange for workshops and other in-service programs for professional personnel.
92. Provide for in-service programs for supportive personnel.
93. Provide for preservice programs for professional personnel.
94. Arrange for staff exchanges with business and industry.
95. Assist supervising teachers in planning for and working with student teachers.
96. Evaluate staff development programs.

Category F: Professional Relations and Self-Development

97. Maintain ethical standards expected of a professional educator.
98. Develop and maintain professional relationships with other administrators.
99. Develop and maintain professional relationships with state department of education personnel.
100. Develop and maintain relationships with personnel in professional organizations.
101. Participate in professional organizations.
102. Participate in professional meetings for self-improvement.
103. Promote professional image through personal appearance and conduct.
104. Assist with the development of state and/or federal plans for vocational education.
105. Participate in the development of vocational education legislation.
106. Prepare policy and commendation statements.
107. Represent teacher interests and concerns to other administrators and the board.
108. Develop effective interpersonal skills.
109. Write articles and materials for journals and other professional media.
110. Read and use information from professional journals, reports, and related materials for self-improvement.
111. Apply management by objectives (MBO) techniques to personal work assignments.
112. Develop cooperative problem-solving and decision-making skills.
113. Assess personal performance as an administrator.

Category G: School/Employer/Community Relations

114. Develop a plan for promoting good public relations.
115. Prepare and recommend public relations and communications policies.
116. Coordinate use of occupational (craft) advisory committees.
117. Organize and work with a general vocational advisory council.
118. Develop working relationships with employers and agencies.
119. Prepare and recommend cooperative agreements with other agencies.
120. Involve community leaders (political and non-political) in school programs and activities.
121. Participate in school organizations.
122. Participate in community organizations.
123. Promote good relationships between vocational and general education staff.
124. Encourage staff participation in community civic, service, and social organizations.
125. Promote cooperative efforts of parent and teacher groups.
126. Conduct conferences with individuals relative to the vocational programs.
127. Meet and confer with visitors.

128. Conduct informational programs for the public (such as open house and career awareness programs).
129. Make public presentations on school programs and activities.
130. Conduct public hearings and meetings on school issues.
131. Conduct alumni relations program.
132. Conduct orientation programs for students and staff.
133. Conduct recognition programs for students, staff, and community supporters.
134. Plan for exhibits and displays.
135. Develop materials to promote the vocational programs.
136. Write news releases for school and area media.
137. Obtain and analyze informal feedback about the school.
138. Evaluate the public relations program.
139. Interpret and apply public "right-to-know" laws and regulations.

Category H: Facilities and Equipment Management

140. Assess the need for physical facilities.
141. Conduct land and facility feasibility studies.
142. Recommend building sites.
143. Recommend the selection of an architect.
144. Oversee architectural planning.
145. Apply building code regulations to school facilities.
146. Submit facility and equipment specifications.
147. Analyze building and equipment contract bids.
148. Oversee the construction of facilities.
149. Recommend acceptance of new building.
150. Provide and maintain residential facilities for students.
151. Procure equipment and furnishings.
152. Plan space requirements for programs.
153. Assign space according to priority needs.
154. Develop and implement an equipment and supply inventory system.
155. Establish preventative maintenance program for equipment and facilities.
156. Establish vehicle maintenance program.
157. Oversee the daily maintenance and upkeep of facilities.
158. Oversee the daily maintenance and upkeep of grounds.
159. Interpret and apply transportation laws and regulations.
160. Arrange for student transportation services.
161. Oversee school cafeteria services.
162. Arrange for vending services.
163. Interpret and apply health and safety laws and regulations.
164. Develop and implement safety programs.
165. Establish emergency plans (such as fire and disaster).
166. Establish and oversee a security program.
167. Schedule and oversee community's use of facilities.
168. Develop long-range facility and equipment plans.
169. Prepare and submit renovation and alteration plans.

Category I: Business and Financial Management

170. Prepare and recommend financial policies.
171. Establish purchasing and payment procedures.
172. Establish receiving and shipping procedures.
173. Prepare and regulate operational budgets.
174. Prepare and regulate program budgets.

175. Prepare and regulate capital improvement budgets.
176. Prepare long-range budgets based on total program requirements.
177. Adopt an appropriate financial accounting system.
178. Analyze the cost of operating various instructional programs.
179. Locate sources of funds for program development and operation.
180. Present levies and bond issues to voters.
181. Approve all major expenditures.
182. Approve requisitions and work orders.
183. Arrange for the investment of surplus funds.
184. Provide for the collection of student fees.
185. Establish and maintain a petty cash fund.
186. Establish procedures for charging for student work.
187. Determine insurance coverage needs.
188. Select and maintain an insurance program.
189. Interpret and apply insurance laws and regulations.
190. Respond to business correspondence.
191. Prepare local, state, and federal reports.

School of Education, University of Pittsburgh. Competencies of Vocational Administrators, Prepared for the Task Force Subcommittee of the Pennsylvania Vocational Teacher Education Advisory Committee, November 1, 1974.

Top Management

Category: I. Philosophy & Objectives

1. Develop and communicate a philosophy of vocational education in terms of its objectives, goals, and purposes and those of general education to provide direction to the total educational program.

2. Develop leadership in developing a broad viewpoint which does not restrict thinking to only one or two conventional narrow areas of vocational education.

3. Utilize and promote in others an adequate working knowledge of the history and development of vocational education through a knowledge of each service area within vocational education.

4. Identify with and support the forces and organizations that tend to raise the standards and practices of vocational education.

Category: II. Organization and Administration

5. Develop, maintain, and utilize a system by which local policies are considered, adopted, implemented, interpreted, evaluated, and revised when essential to the operation and improvement of school functions.

6. Interpret, communicate and administer federal, state, and local policies that govern and regulate the operation of a vocational program.

7. Develop and submit for approval short-range (one year) and long-range (five years) administrative plans.

8. Identify, communicate and represent vocational education interests with federal and state resources and organizations that are authorized to provide training programs for disadvantaged, handicapped, and other persons not included in the regular vocational program.

9. Keep informed of and communicate special federal and state funding opportunities.

10. Direct development, provide input into, submit proposals for special federal and state funding.

11. Approve the school's instructional and safety program based on legal requirements and safety standards (Occupational Safety and Health Education Act) pertaining to vocational education.

12. Develop or approve and coordinate a communications system with staff, chief school administrators, committees, governing boards, educators in other schools, and students regarding educational goals,and purposes, curriculum, activities, and all other subjects of importance concerning the educational program.

13. Develop and/or approve and utilize effective techniques of public relations (e.g. brochures, news releases, meetings, conferences) and communications with participating schools, parents, governing boards, and the public at large to improve the understanding and support of vocational education.

14. Develop and administer an organizational structure chart and/or description showing the relationship of positions, individuals, and programs to the organization as a whole.

15. Request and utilize assistance and cooperation of state staff and fellow administrators in promoting, developing, maintaining, and evaluating the vocational program.

16. Approve a records management system which will provide safe and efficient storage for the school's documents and records (e.g. student and personnel records, public information items, etc.).

17. Direct preparation of, review, and submit required reports and reports deemed appropriate regarding enrollments, program planning, advisory committees' activities.

18. Approve a system for routing printed materials, mail, information and supplies to those on the staff who need or may find the materials received of interest and value.

19. Develop and/or approve a system to maintain up-to-date teachers' and students' handbooks and written operation procedures.

20. Utilize legal counsel for faculty and staff on the legal implications of the teacher/administrator, teacher/supervisor, teacher/teacher, teacher/parent, and teacher/pupil roles.

21. Approve an in-school student lunch program.

22. Approve an up-to-date rationale which relates specific vocational education instructional activities to the total vocational education program.

23. Administer and promote a short-range and long-range educational program plan for students which will provide vocational instruction in accordance with established goals, policies, regulations, and standards.

24. Approve programs (self-contained and mainstreamed) geared to the disadvantaged and special needs students.

25. Review and submit specific recommendations for major course and/or program changes to appropriate committees or governing board.

26. Identify specific legal implications affecting vocational students in hazardous occupations.

Category: III. Instructional Program

27. Approve courses of study, an instructional resource center and instructional software and hardware to implement the total instructional program.

28. Approve and provide input into the work of outside curriculum specialists for assistance in developing curriculum.

29. Approve and direct appropriate service area (craft) advisory committees to assist in determining curriculum content.

30. Promote use of available studies, surveys, and research to determine ongoing program direction, size, and content.

31. Review and submit for approval a system for evaluation of the quality of instruction.

32. Approve and communicate a realistic, flexible, and workable schedule of course offerings.

33. Approve the development and utilization of specific performance standards for all occupational areas.

34. Review and submit for approval a grading system compatible with or convertible to the grading systems used by participating schools.

35. Review and submit for approval agreements with community sources for providing additional program opportunities.

Category: IV. Physical Facilities

36. Determine, with selected staff members, the specific needs for adequate and appropriate facilities to operate an effective and efficient educational program.

37. Review and approve or submit to the Board for approval recommendations for essential changes and alterations of the physical facilities to provide improvement or expansion of the instructional program.

38. Develop, with selected staff members, a plan to acquire the needed facilities to operate an effective and efficient educational program.

39. Review and approve recommendations for new and different types of equipment to keep the instructional program compatible with the needs of business and industry.

40. Review external vocational education facilities to accommodate expanded enrollments and technological advancements related to the vocational program.

41. Procure when available, surplus equipment, tools, and supplies from state and federal dispersal centers.

42. Recommend to the Board a program to provide regular inspections throughout the school, including instructional areas, to locate hazardous conditions and take those steps needed to correct unsafe conditions.

43. Develop and submit a security system to protect the school building and equipment from damage and theft.

44. Review and approve a system for receiving, storing, and distributing all supplies and materials.

45. Develop and submit for approval the policy to regulate the use of the school building and facilities by outside groups and individuals.

46. Review and submit for approval work loads for buildings and grounds maintenance and custodial staff.

47. Supervise the development of the fiscal operating budget in line with approved program planning and established priorities.

48. Approve and administer an acceptable accounting system, providing for checks and balances and audits, for the control of all appropriated school monies in line with the approved state accounting manual.

49. Direct the development of a fiscal management procedure for acquiring operational funds through taxation, advance payments, vouchers, and reimbursements.

50. Direct the development of a program of investments and interest-bearing accounts for inactive funds.

51. Supervise the preparation of and submit periodic reports to the governing board and appropriate operating committees relative to the financial status of the school.

Category: V. Financial Planning and Management

52. Review and approve a perpetual inventory system to accurately account for equipment, tools, supplies, and materials.

53. Review and recommend the administrative details of the appropriate insurance programs carried by the school and the insurance program which will be offered to students as school insurance.

54. Develop and administer a system for approving travel expenses for members of the staff.

55. Review and recommend to the governing body a schedule of charges to be made for school-produced items and for services rendered.

56. Develop, administer, and communicate a procedure for establishing priorities for the use of funds and other available resources.

57. Determine the appropriate criteria for writing specifications for the purchase of equipment, tools, and supplies in accordance with the school code.

58. Keep informed of and comply with the regulations regarding the use of bids in the purchase of equipment, supplies, and services.

59. Review and submit for approval specifications for the purchase of equipment, tools, and supplies.

60. Review and submit for approval appropriate recommendations to the authorized purchasing agent for purchase.

61. Direct preparation of long-range projections of needs for facilities, equipment, and supplies and financing of existing and emerging vocational education programs.

62. Direct the preparation of materials for and promotion of passage of bond issues affecting the vocational education programs.

Category: VI. Staff Personnel

63. Determine and recommend the number of professional and nonprofessional support persons which are required for the efficient and economical operations of the school.

64. Direct the development of and approve position descriptions specifying the duties and responsibilities for persons filling each of the established positions.

65. Develop and utilize a system for recommending the selecting staff members by (a) developing selection criteria, (b) using effective interview skills, and (c) effectively communicating recommendations.

66. Develop a checking system that all faculty and staff personnel hold valid certification.

67. Direct and participate in an induction and orientation program for all new personnel.

68. Maintain a record of special assignments delegated to members of the faculty so as to eliminate overloading of some persons.

69. Participate as a recognized leader and advisor in the field of occupational education within the school and the community.

70. Develop, maintain, and promote good human relationships in all dealings with the staff and student body and holding inviolate personal business and political information.

71. Develop, maintain, and promote an active and professional relationship with state, county, and local educators.

72. Participate as the liaison representative between the vocational school or department and all participating schools.

73. Coordinate the development of and implement an equitable and sound salary structure for professional and nonprofessional personnel.

74. Submit to governing board and implement approved sound, fair, and reasonable personnel policies including those referred to as "fringe benefits."

75. Develop a plan to involve individuals in making decisions which affect them.

76. Assist in developing, implementing, and evaluating the procedure by which members of the staff can have a fair and impartial discussion of their problems, complaints, and grievances.

77. Administer and maintain a confidential personnel record system for all members of the staff.

78. Approve a roster of substitute teachers.

79. Provide leadership to develop solidarity of purpose within the staff.

80. Plan and direct staff meetings that have purpose and offer a challenge to members of the staff.

81. Assist in developing, establishing, and participating in an in-service education plan related to the recognized needs of the teaching and administrative staffs including provisions for upward mobility.

82. Participate as host and/or provide escorts for individuals or groups that visit the school.

83. Develop and promote communication and professional relationships with local private and proprietary schools.

Category: VII. Student Personnel

84. Determine and submit for approval the basis for determining the number of students that can be accommodated in the total program.

85. Approve policies and procedures, in cooperation with the participating schools, for the selection, orientation and registration of students in response to community changes for entrance into the vocational program.

86. Approve with participating schools procedures for determining and coordinating compulsory attendance and keeping of attendance records.

87. Approve a comprehensive guidance within the school and in cooperation with participating schools including placement and follow-up of all students, graduates and early school learners.

88. Approve the medical service program that is maintained for the welfare of the students.

89. Approve a program of student government.

90. Approve a system for handling discipline cases that have been referred by members of the staff to the administration.

91. Be informed of and comply with the Pennsylvania State Students' Bill of Rights.

Southern Illinois University at Carbondale, The Implementation of a Model Competency Based Graduate Program in Occupational Education Administration, Department of Occupational Education, Contract numbers PCE-C5-017, August, 1975.

Occupational Education Administration

Competency List

PROGRAM PLANNING & IMPLEMENTATION: PERFORMANCE AREA 1

Be responsible and accountable for promoting, developing, sustaining, and evaluating vocational programs for a comprehensive high school system, an area secondary vocational center, or a community college.

Occupational Program Planning

1.1. Given the task of planning a total vocational program, the occupational educational leader will be able to:

1. prepare a short-range and a long-range program plan for vocational education in the school.
2. determine the occupations for which training is to be offered in the vocational program.
3. analyze long-range course needs for the vocational program.
4. identify the competencies needed for entry into an occupation.
5. secure assistance from staff members in the preparation of the local plan.
6. submit a proposed program plan to the local administration based upon the results of a vocational education survey.
7. analyze job market, student interests, initial cost, and ongoing cost related to existing or proposed specialiazed vocational programs.
8. write general objectives for a vocational education program.
9. determine manpower implications for vocational education.
10. verbalize the economic implications for vocational education.
11. secure the services of Federal and State agencies for program development.
12. identify employment trends at the local, state, regional and national level.
13. identify changes in technology and equipment in industry relating to existing vocational programs.
14. design relevant programs and courses that are reflective of constantly changing occupations.
15. provide leadership in the identification of the vocational education purposes and how they relate to the objectives of the institution.

16. develop programs geared to the disadvantaged and special needs students.

17. develop and present a program to prospective students and the community which explains the vocational program available to them.

18. apply the knowledge of state and federal legislation and its impact upon program planning.

External Resources and Planning

1.2. Given the need for using external resources in program planning, the occupational education leader will be able to:

19. enlist the aid of state employment office personnel, key figures in business and industry, state staff, and teacher-training institutions for program planning purposes.

20. consult the local office of the U.S. Employment Service to obtain information on manpower trends and needs.

21. identify the role and function of advisory committees and orient the committee to that role and function.

22. obtain school board authorization for organizing an advisory committee.

23. establish the criteria for and select advisory committee members.

24. establish a working relationship with advisory committee members.

25. enlist the aid of the advisory committee for long-range program planning purposes.

26. use the expertise of the advisory committee in making an analysis of an occupational field.

27. enlist the assistance of management and labor representatives to identify a variety of occupational opportunities.

Analyzing Operational Programs

1.3. Given an operational occupational education program, the occupational education will be able to:

28. develop a procedure for keeping all staff members informed about all vocational programs and courses.

29. provide leadership for redesigning programs and courses as a result of an administrative edict.

30. schedule staff and facilities for maximum program utilization.

31. seek agreements with community sources for providing additional program opportunities.

32. evaluate alternative instructional avenues in terms of benefit vs. cost.

33. build flexibility into the vocational schedule so that students can change their level of training if justified.

34. identify specific legal limitations affecting vocational students in hazardous occupations.

35. analyze current and projected instructional needs.

Improving Instruction And Curriculum

1.4. Given the need to improve instruction and modify program components, the occupational education leader will be able to:

36. assess program direction in light of criteria provided through organizational patterns at the state and federal level.

37. involve employers and labor representatives when evaluating vocational courses and programs.

38. involve students, staff members, administrators and outside agencies in the evaluation of the vocational program.

39. develop and implement a procedure for evaluating the total vocational program.

STAFF RECRUITMENT: PERFORMANCE AREA 2

Analyze from a base of knowledge, sources of applicants and the requirements of each position, in terms of job specification, professional preparation and interpersonal relations needed for a position.

Writing Job Descriptions

2.1 Given a packet of job descriptions, and other relevant data, the occupational education leader will be able to:

40. determine sources from which applications may be received, i.e., colleges and universities.

41. determine alternate sources of employees such as neighboring schools and industry.

Analyzing Applicant Credentials

2.2. Given a set of credentials and data relevant to the position to be filled the occupational education leader will be able to:

42. determine which person can meet present instructional needs.

43. predict candidate ability to meet future instructional needs.

44. determine the stability of the candidate and the likelihood of providing stability to the staff.

Interviewing Candidates

2.3. Given training in the interview process the occupational education leader will be able to:

45. determine an applicant's perception of his role as an instructor.

46. depict the instructional responsibility of an open position.

47. assess an applicant's attitude toward himself during the interviewing.

48. evaluate the feeling of the applicant about the importance of the position he seeks.

Choosing Staff Members

2.4. After evaluating credentials and interviewing the applicant, the occupational leader will be able to:

49. choose the job applicant whose temperament, academic preperation and professional attitude best suit the position open.

50. hire professional staff members.

PERSONNEL DEVELOPMENT AND MANAGEMENT:
PERFORMANCE AREA 3

Stimulate the development of, establish, and evaluate the criteria and the processes by which faculty members may be evaluated, promoted, disciplined, and released through due process in order to assure the quality of the faculty and high faculty morale.

New Staff Orientation

3.1. Given a group of new staff members the occupational education leader will be able to:

51. help new staff members acclimate themselves to the job and the community, especially the first few days.

52. assist new staff members to understand the policies and regulations of the institution.

Staff In-Service

3.2. Given staff needs, individual staff characteristics, a description of the educational environment and its budget, the occupational education leader will be able to:

53. provide in-service training to serve individual needs of those being trained.

54. develop and implement an in-service program for all staff members with special activities for beginning teachers.

55. promote among staff members the desire for constructive interrelationships with students.

56. encourage staff members to pursue academic and work experience to develop or up-date skills.

57. explain to staff members in an objective manner where they are most qualified and where they are most lacking.

58. plan with staff members for their continued professional growth through specific academic and non-academic experiences.

Organizational Climate

3.3. Given individual performances and accomplishments and the personality of staff members, the occupational education leader will be able to:

59. identify factors which provide staff members with job satisfaction and dissatisfaction.

60. state legal requirements for dismissal or failure to grant tenure to a staff member.

61. inform a person when he is in danger of being dismissed and give him the opportunity to take steps to avoid dismissal.

62. inform a person who is not to be rehired specific, concrete reasons for his dismissal.

63. criticize a staff member without stripping him of his dignity.

64. supply another hiring official an objective account of your reasons for dismissing a former staff member if that official contacts you.

65. determine staff members' interests before establishing an in-service training program.

66. maintain staff morale particularly when there is disagreement among staff members concerning one or more aspects of the existing program on new new programs being proposed.

67. foster a climate where teachers look for ways to cooperate with other disciplines in providing broader experiences for students.

68. create a climate in which staff members believe that their inquiries are welcomed by colleagues and support personnel alike, and do not represent shortcomings but a desire to learn.

69. explain the position(s) of administrative bodies to staff members who resent or disagree with the position(s) taken.

PROGRAM OPERATION: PERFORMANCE AREA 4

Place in operation all program components, staff, students and all other resources to provide a functional program which meets the needs of students and the community.

Scheduling Staff

4.1. Given knowledge of staff problems and scheduling difficulties the occupational education leader will be able to:

70. identify methods of securing assistance from your staff in problems arising in program operation.

71. provide a safe, healthful environment which is conducive to staff members work.

72. balance work loads of staff members.

73. utilize effective scheduling of staff members and facilities to afford maximum benefits.

Student Teachers

4.3. Given information on student teaching policies, regulations, and institutional objectives, the occupational education leader will be able to:

74. assist supervising teachers in interpreting policies and regulations of the institution to student teachers.

75. evaluate classroom instruction based on stated goals within the framework of the philosophy and goals of the institution.

76. identify performance standards for each task in an occupation to the staff members training students for that occupation.

Advisory Committees

4.3. Given knowledge of working with advisory committees, institutional or community professionals, the occupational education leader will be able to:

77. recruit businessmen, professionals, and technicians as resource persons for vocational classes.

78. establish working relationships with advisory committee members.

79. supervise the advisory committee in conducting a vocational education survey.

80. indicate resource persons who can provide consultation service to the advisory committee.

81. communicate the date, place, and agenda of an advisory committee meeting to all persons concerned.

82. collect occupational data from employers to identify vocational education needs.

Data Collection And Results

4.4. Given knowledge of special reports, data collection and educational surveys, the occupational education leader will be able to:

83. organize reports into a concise form so that only the data related to the subject of the report is printed.

84. accumulate data of vocational reports required by the state department of education.

85. obtain administrative approval for a vocational education survey.

86. design a concise, clear follow-up instrument which will furnish needed data and that is brief enough that participants will complete and return the instrument.

Work Place Safety

4.5. Given a knowledge of accident prevention, legal requirements, and student special needs, the occupational education leader will be able to:

87. develop and communicate a safety program based on legal requirements and safety standards which will permit optimum utilization of equipment.

88. adapt existing instructional programs to students with special needs.

Curriculum/Time Evaluation

4.6. Given knowledge of vocational programs, scheduling of faculty and students the occupational education leader will be able to:

89. evaluate content and time allotted for present courses and programs.

PROGRAM MANAGEMENT: PERFORMANCE AREA 5

Apply management techniques to all aspects of a total vocational program utilizing external and internal resources.

Supervisory Functions

5.1. Given the knowledge of supervisory, delegative, and cooperative responsibilities and the means of their effective application with staff personnel, the occupational education leader will be able to:

90. identify those staff members who are capable and willing to accept and carry out responsibilities delegated to them.

91. incorporate controversial issues when making a decision on one particular issue.

92. utilize the skills of staff members in solving problems related to the vocational programs, and give due credit to the individuals involved.

93. establish an effective chain of command with a responsible supervisor at each level.

94. keep staff members clearly informed as to what is expected of them.

95. inform staff mambers of the accepted methods to be used in the resolution of grievances.

96. settle grievances quickly after listening to all issues and positions.

97. secure maximum performance from staff members.

98. assist staff members in defining goals, tasks, and purposes of new programs as well as developing new approaches to instruction (team teaching, modular scheduling, etc.).

Occupational Program Follow-Up

5.2. Given a school program and the procedures involved to effectively guide the student's learning and meeting of his goals, the occupational education leader will be able to:

99. appraise the value of general education to vocational students.

100. appraise the value of various testing methods as a basis for counseling students.

101. evaluate programs on the basis of the progression of student behavior toward established goals.

102. determine the reasons students drop out of the vocational program.

103. determine the need for follow-up questionnaires.

104. devise a system for continual follow-up information on the placement, employment and training status of each graduate of the vocational program.

105. motivate staff members to provide information to prospective students for all vocational offerings.

106. work with guidance personnel to develop occupational information describing local and national opportunities.

107. suggest to teacher-coordinators methods of improving in-school and on-the-job cooperative vocational education instruction.

108. interpret the role of guidance, counseling and placement in vocational education.

Management Style Development

5.3. Given the knowledge of management techniques, the occupational education leader will be able to:

109. define background information concerning controversial issues which require decisions.

110. interpret and apply federal legislation related to vocational education.

111. correlate job market, student interest, initial cost and on-going cost related to existing or proposed specialized vocational programs within

the vocational education program.

112. delegate authority to units or individuals nearest the point where the action takes place.

113. perceive evaluation of the program as the responsibility of students, staff members, administrators and outside agencies.

114. express and demonstrate a philosophy consistent with the objectives of vocational education.

115. realize when he has made a mistake and profit from the experience.

116. examine controversial positions, make a decision and justify the position taken.

117. maintain ethical standards expected of a professional educator.

118. devise a plan for survey staff to follow in conducting a vocational education survey.

119. cooperate with fellow administrators in education planning and decision making at the local level.

120. select the most appropriate system or procedure for each problem with which he is faced.

Complying With Legislation

5.4. Given the procedures for establishing public relations and the ability to interpret and comply with legislation at the local, state and federal levels, the occupational education leader will be able to:

121. utilize state office personnel anytime their expertise can assist in any facet of the vocational program.

122. plan, schedule, execute and evaluate in-service training systematically.

123. cooperate with state staff members in promoting, developing, sustaining and evaluating vocational program.

MANAGEMENT OF PHYSICAL FACILITIES, SUPPLIES AND EQUIPMENT: PERFORMANCE AREA 6

Prepare budgets and acquire and utilize facilities, supplies and equipment to their greatest advantage for the institution.

Facility And Equipment Budgeting

6.1. Given the current budget, an inventory of present physical facilities and the curriculum the occupational education leader will be able to:

124. specify the long range facility, equipment and supply needs for the vocational education program.

125. prepare a long-range budget which projects the financial needs of the total vocational education program.

126. plan an operating budget proposal for consumable supplies, services and materials needed in a vocational course.

127. prepare a capital outlay budget proposal for the total vocational program.

128. prepare budgets based on anticipated incomes from federal, state and local sources.

129. file reimbursement claims with the Division of Vocational and Technical Education.

130. analyze capital outlay and projected funds needed to begin and continue a new vocational course or program.

131. allow for flexibility in a budget for price changes, enrollment changes and new products.

132. develop and implement a procedure for establishing priorities for the use of funds and other available resources.

133. verbalize and substantiate budgeting priorities, property and accountability decisions you have made to appropriate persons at any time.

Purchasing Equipment

6.2. Given budgetary information and present needs of the vocational program, the occupational education leader will be able to:

134. identify financial requirements for purchasing needed equipment.

135. arrange for additional vocational facilities to accommodate expanded enrollments and technological advancements related to the vocational program.

136. identify various sources of securing needed equipment.

137. design a procedure for acquiring the supplies and equipment needed in each vocational course.

138. identify new tools and equipment needed for the vocational program during the current academic year.

Utilizing Physical Facilities

6.3. Given the floor plan of physical facilities the occupational education leader will be able to:

139. plan vocational laboratory layouts to gain maximum benefits from available space.

140. equip teaching stations to achieve the stated objectives for each program.

PUBLIC RELATIONS: PERFORMANCE AREA 7

Analyze the overall structural aspect of the public relations and publicity network in order to: a) better evaluate sources and kinds of information available, b) better utilize the communication media to convey vital information to the various situationally involved groups and individuals throughout the community, and c) become involved in service groups.

Ascertaining Public Opinion

7.1. Given a number of general problems associated with occupational education,tthe occupational education leader will be able to:

141. identify the make-up of the community before planning a program of school-community relations.

142. obtain informal feedback on the vocational program through contacts with individuals in the school and community.

143. evaluate the degree to which the objectives of the community relations program have been met.

144. ascertain and evaluate public opinion about vocational programs.

Publicizing Occupational Programs

7.2. Given an outline of the purposes of occupational education and a description of the community, the occupational education leader will be able to:

145. speak to school and community groups about the vocational program.

146. publicize the establishment of the advisory committee, its members and its functions to the school and community.

147. communicate what is going on in business and industry to the school staff.

148. publicize the purposes and objectives of a vocational education survey.

149. use a variety of communication techniques on a carefully planned basis to influence public opinion.

150. conduct public relations activities to reach external publics (merchants, businessmen, community organizations, professional organizations, etc.,).

151. conduct public relations activities to reach internal publics (school administrators, teachers, guidance staff, and students).

152. write articles about newsworthy activities being carried on in the vocational program for the news media.

153. conduct an open house to familiarize members of the school and the community with activities of the vocational program.

154. provide brochures to acquaint the school and community with various aspects of the vocational program.

Working With The Community

7.3. Given the description of the formal and informal power structure of the community, the occupational education leader will be able to:

155. identify ways staff members can achieve community involvement which will build better public relations for vocational education.

156. work with different racial and ethnic groups within the community.

157. describe to vocational education staff members how they can improve their image by productively participating in community, civic, service or social organizations.

158. assist with community, business and industry sponsored activities.

159. identify supportive community service groups.

BEHAVIORAL COMPETENCY STUDY - Vocational Administrators. Temple University, Philadelphia, Unpublished Draft, 1975.

ADMINISTRATION OF FUNDS AND FACILITIES

1. Develop a fiscal budget in the form specified by the Department of Education and submit to the governing board for consideration and approval.
2. Work with selected staff members to develop a budget that will satisfy their respective needs.
3. Control the expenditure of monies in accordance with the amounts provided in the approved budget.
4. Keep the governing board and the operating committee advised as to the financial status of the school.
5. Recommend, when the need arises, the transfer of funds within the governing board.
6. Request from the Department of Education permission to make in-budget transfers of funds which have had the prior approval of the governing board.
7. Adopt accepted accounting methods and procedures to record all receipts expenditures and transfers of fund.
8. Arrange for audit of all financial accounts in the manner prescribed by the appropriate school laws.
9. Provide the method by which all the internal funds are to be administered and audited.
10. Establish a policy and schedule of charges to be made for school-produced items and for service rendered.
11. Maintain a portfolio of insurance policies and legal papers and provides for their protection from loss.
12. Set up and administer bank accounts when directed to do so by the governing board and operating committee.
13. Take the lead to plan and acquire adequate and appropriate facilities to operate an effective and efficient educational program.
14. Plan the location and arrangement of machinery and equipment to provide efficient and safe instructional areas. Determine equipment and supply needs.
15. Prepare specifications for the purchasing of machinery, equipment, tools and supplies.
16. Review bids received and make appropriate recommendations to the authorized purchasing agent.
17. Establish and supervise the procedures to be followed in receiving and storing purchased items.
18. Control purchases in relationship to budget allowances.
19. Develop, install and supervise a perpetual inventory system to accurately account for machinery, equipment, tools, supplies and materials.
20. Procure, when available, surplus machinery, equipment, tools and supplies from state and federal dispersal center.
21. Prepare applications and supporting information to obtain financial aid from Federal, State or other sources for the purchase of buildings, machinery and equipment.
22. Establish and supervise a security system to protect the school building and equipment.
23. Handle the administrative details of the insurance programs carried by the school.
24. Set the standards and supervise the quality of the housekeeping throughout the school and grounds.

25. Administer the policy to regulate the use of the school building and facilities by outside groups and individuals.

PERSONNEL ADMINISTRATION

26. Knowledge of labor law, civil service regulations, etc.
27. Engage in labor relations and negotiation.
28. Write job descriptions defining scipe, relationships, responsibilities and authority.
29. Establish position qualifications.
30. Select and recruit qualitied people for each position.
31. Orient and familiarize new people with the situation.
32. Reward and discipline.
33. Develop an organization structure and chart to show the relationship of positions and individuals to the organization as a whole.
34. Develop position descriptions specifying the duties and responsibilities for persons filling each one of the established positions.
35. Determine and recommend the number of professional and non-professional persons that are required for the efficient and economical operation of the school.
36. Recruit, interview, screen and recommend qualified candidates for position vacancies to the appropriate committee or governing board.
37. Be assured that all faculty and staff personnel hold valid certification.
38. Maintain a record system from which the certification data for all members of the professional staff can be obtained.
39. Maintain a confidential personnel record system for all members of the staff.
40. Plan and conduct staff meetings that have purpose and offer a challenge to members of the staff.
41. Plan, develop and participate in in-service training programs for upgrading the quality of staff and the instruction being provided.
42. Provide special guidance and assistance to members of the staff having less than the desired level of certification in planning their program for professional improvement and status.
43. Provide leadership to develop solidarity of purpose within the staff.
44. Encourage members of the staff to maintain membership and participate in the activities of professional organizations.
45. Provide the procedure by which members of the staff can have a fair and impartial discussion of their problems, complaints, and grievances.
46. Make special assignments to members of the staff on a fair and equitable basis.
47. Plan and coordinate staff activities in a manner which will bring the academic and shop and laboratory teachers together into a unified staff having but one common purpose.
48. Develop and administer sound, fair and reasonable personnel policies including those referred to as "fringe benefits."
49. Develop, administer and recommend changes to the governing board an equitable and sound salary structure for professional personnel.
50. Rate professional staff.
51. Provide visiting days during the school year on which members of the staff are permitted to visit programs in other schools.
52. Provide a system for approving and controlling travel expenses for members of the staff.
53. Recommend changes and alterations to the physical facilities that are considered essential to providing improvements in the instructional program.

54. Recommend new and different types of machinery and equipment to keep the instructional program in tune with the current needs of business and industry.
55. Evaluate and procure instructional equipment, supplies, and materials essential to provide a quality program.

ADMINISTRATION OF EDUCATIONAL PROGRAMS

56. Develop a philosophy of Vocational education to provide direction to the local educational program.
57. Define the philosophy of vocational education in terms of objectives, goals and purposes.
58. Consolidate and intergrate the goals of vocational education with those of general education.
59. Acquaint and inform other educators and the public with the objectives, goals, and purposes of vocational education and the relationship of these to a total program of education.
60. Establish appropriate reporting systems.
61. Develop performance standards.
62. Measure results
63. Take corrective action.
64. Know school law
65. Prepare proposals for grants (federal & state)
66. Work cooperatively with local, state and federal agencies in developing local vocational programs.
67. Coordinate programs in school district.
68. Approve budget requisitions for supplies and equipment.
69. Maintain contact with employment agencies.
70. Formulate policies concerning the total vocational program and staff.
71. Keep adequate records of students, teachers, equipment, and facilities
72. Develop policies to be considered and adapted by the appropriate committees, the operating committee and the governing board.
73. Implement and carry out the policies adopted by the operating committee or governing board.
74. Evaluate current policies, practices and procedures in relationship to changing conditions and recommends revisions when deemed appropriate.
75. Keep self, operating committee and governing boards informed with regard to Federal, state and local policies that govern and regulate the operation of a vocational program.
76. Develop and administer a guidance program within the school and in cooperation with participating schools.

CONTINUING STAFF DEVELOPMENT

77. Determine training needs
78. Establish a continuing in-service training program to make proficient by instruction and practice.
79. Develop personnel by improving knowledge attitudes and skills.
80. Determine retraining needs of all employed persons.
81. Organize effective programs of retraining personnel.
82. Keep up-to-date on new occupational materials and method.
83. Work closely with teacher education institutions in developing effective programs at the pre-service and in-service levels.

84. Encourage teachers to write professional articles.
85. Hold individual and group conferences to discuss instructional problems.
86. Provide space, equipment,and supplies as a resource and planning center to develop and produce curriculum and course materials.
87. Provide means by which research materials and current articles are made readily available to the staff.

ADMINISTRATIVE PROCESSES

DISCOVERING

88. Forecast - where present course will lead.
89. Survey the requirements of the community in relation to the need for new courses and programs
90. Ascertain the training needs of the local community.
91. Seek advisory services from qualified individuals regarding vocational education.
92. Establish and utilize an advisory council for the total vocational program.
93. Aid in organizing and utilizing occupational advisory committees.
94. Serve as ex-office member of all occupational advisory committees.

DIAGNOSING

95. Analyze problems - gather facts, ascertain causes, develop alternate courses of action.
96. Requesting services of state staff and consultants where and when needed.

SETTING GOALS

97. Set objectives - determine desired end results.
98. Develop strategies - decide how and when to achieve goals.
99. Determine conditions that will exist when key duties are well done.
100. Assist in determining departmental aims.

PLANNING

101. Set procedures and standardize methods.
102. Organize curriculums and courses.
103. Plan for necessary housing equipment and supplies
104. Prepare or assist in preparation of annual and long-range goals of programs.
105. Make recommendations in all aspects of the development and construction of facilities.
106. Promote staff membership in professional organizations
107. Aid in development instructional guides.
108. Conduct workshops to develop instructional materials.
109. Assist in adoption of textbooks or reference books.
110. Establish and maintain safety programs.
111. Determine the number of students that can be accommodated in the total program.
112. Develop policies and procedures, in cooperation with the authorities of the participating schools, for the selection, orientation and registration of students for entrance into the vocational program.
113. Plan, supervise and coordinate the school bus system where applicable.

MAKING DECISIONS

114. Arrive at rational decisions on problems as they occur, without procrastination.
115. Develop policies - make stadning decisions on important, redurring matters.

ESTABLISHING PRIORITIES

116. Establish priority sequence and timing steps.

ORGANIZING

117. Establish an organizational structure - preparation of organizational chart.
118. Delineate relationships - define liaison lines to facilitate coordination.
119. Establish position qualifications - define qualifications for persons in each position.
120. Promote coordinated program between vocational program and other subject matter areas.

ADMINISTRATIVE PROCESSES (con't)
DELEGATING

121. Assign responsibilities and exact accountability for results.
122. Determine those areas which can best be delegated - to whom delegated and when.

COMMUNICATING

123. Establish and maintain effective vertical and horizontal lines or oral and written communications hat will insure a free flow of necessary information.
124. Inform the public, school administrators and others of the vocational education program.
125. Establish and maintain relationships with all types of labor, trade, agricultural, management, and manpower agencies in the community.
126. Prepare reports of activities for public information.
127. Attend county court or city council meetings in matters relating to vocational education.
128. Keep teachers informed of effective teaching methods.
129. Explain federal and state legislation to local educators.
130. Explain world of work to educators and laymen.
131. Explain federal and state legislation to laymen.
132. Compile and distribute lists of instructional materials (Subject matter, audio visual, etc.)
133. Inform teachers of current literature.
134. Review and report relevant research projects to faculty.
135. Keep the participating schools informed about activities that are considered to be of mutual interest and concern.
136. Prepare material for release of school developed materials to persons outside the organization.
137. Maintain a record of newspaper clippings that make reference to school activities.
138. Prepare and supply participating schools with information which is essential to their reporting procedures.
139. Participate in student assemblies when personal appearances are pertinent and appropriate.

140. Set up and administer the system through which the student body is informed in advance when school sessions are to be canceled because of snow or other unforeseen conditions.
141. Maintain harmonious working relationship with the administration and staff of all participating schools.
142. Maintain a professional relationship with State, County and local educators.
143. Serve as the liaison representative between the vocational school or department and all participating schools.
144. Serve as recognized leader and advisor in the field of occupational education within the school and the community.
145. Maintain good relationships with business, industry, labor, government and educational organizations.
146. Practice good human relationships in all dealings with the staff and student and student body.

ADMINISTRATIVE PROCESSES (con't)
EVALUATING

147. Insure progress toward objectives according to plan.
148. Ascertain extent of deviation from goals and standards.
149. Provide for continous evaluation of vocational programs.
150. Conduct vocational program evaluations.
151. Observe vocational staff in classroom.
152. Develop a grading system that is compatible with the systems used by the participating schools.
153. Evaluate on a regular basis, the quality of instruction being provided by the professional staff and take corrective action to improve those areas that found to be in need of improvement.

COMPETENCIES NEEDED TO MEET STANDARD IV
UNDERSTANDING OF THE CRUCIAL AND DYNAMIC ROLE OF THE SCHOOL IN OUR CULTURE

154. Possesses a knowledge of the structure of American occupations and industry.
155. Understands of the manpower and industry relationships.
156. Understands occupational sociology.
157. Know how to modify courses of study to conform with current industrial and business practices and the needs of occupations.

KNOWLEDGE AND SKILLS NEEDED TO FOCUS THE RESOURCES OF THE SCHOOL ON RECOGNIZED SOCIAL CONCERNS

158. Develop programs of occupational training.
159. Analysis the needs of the youth and adults of the community.
160. Contact business and industry to relate effectively the classroom instruction to the needs of the student learner or employed worker.
161. Organize, promote and develop Vocational and Technical classes for in-school youth, out-of-school youth and adults.
162. Keep the community constantly informed as to the objectives, methods and results of the school program.
163. Translate community and man-power needs into meaningful vocational programs.
164. Work cooperatively with persons and groups in developing a total educational program.

PROCEDURES FOR MEETINGS STANDARD V
SELECTION

165. The candidate must have met all State Department of Education qualifications.

RETENTION

FINAL EVALUATION PROCEDURES, PERFORMANCE ATTESTED TO BY CANDIDATES WILL DEMONSTRATE QUALITIES OF LEADERSHIP

166. Ability to coordinate - relate efforts in the most effective combination.
167. Manage differences - encourage independent thought and resolve conflict.
168. Manage change - stimulate creativity, and innovation in achieving goals.

ADMINISTRATIVE PROCESSES (con't)
SENSITIVITY

SCHOLARSHIP

169. Demonstrated acceptable scholarship at the graduate level.
170. Demonstrated an ability and interest in a self-directed program of self-development.
171. Demonstrated a continuing interest in professional development.

INTELLIGENT HUMAN RELATIONS

172. Posesses a keen insight into the human factors involved in personnel management.
173. Appreciates the rights of others.
174. Has acceptable personal habits and attitudes.
175. Is versatile and flexible.
176. Is dependable.
177. Is willing to listen.

SKILLS AND INSIGHTS NECESSARY FOR EFFECTIVE SELECTION

178. Conducts individual discussions.
179. Possesses knowledge of basic needs of people.
180. Conducts probing interviews.
181. Measure individuals qualifications against standards.
182. Recruits qualified people for each position.
183. Familiarize new people with job situation.

CONTINUING DEVELOPMENT OF ALL SCHOOL PERSONNEL

184. Organize and direct programs to make all personnel proficient by instruction and practice.
185. Persuade and inspire people to take desired action.

HUMAN RELATIONS

186. Let each staff member know where he stands.
187. Gives credit where credit is due.
188. Informs others in advance of change.
189. Promotes staff participation.
190. Gains staff confidence.
191. Maintains "Team" approach.
192. Understands human needs.
193. Adjusts to different people and conditions.
194. Understands basic needs of people.
195. Recognizes individual differences.

APPENDIX E

Competency Lists - Part 5: For New and Related Areas - Career Education, Community College Instructors, Part-Time Vocational Education Call Staff, and Vocational Counselors

Fourteen Lists from National Studies

American Vocational Association....page 280
Antonellis........................page 281
Stephen Austin State University....page 291
Gunderson and others..............page 293
Hansen............................page 298
Holloway..........................page 301
Malyn-Smith.......................page 307
University of Michigan............page 317
Newton and Feck...................page 318
Norton............................page 319
Odbert and Trotter................page 326
Ohio State University.............page 328
Hoyt - USOE.......................page 334
University of Wisconsin...........page 336

Draft Copy

CONCEPTS FOR A SUGGESTED VOCATIONAL TEACHER AND COUNSELOR EDUCATION INSTRUCTIONAL UNIT--THE VOCATIONAL TEACHER OR COUNSELOR'S RELATIONSHIP TO HIS PROFESSIONAL VOCATIONAL ASSOCIATIONS. Mark Nichols, Editor
American Vocational Association, Inc.
Washington, DC 1971

The vocational teacher or counselor trainee will:

1. Understand the purpose and function of the State Vocational Association.
2. Become familiar with the current year's program of work of the State Association, its objectives, and recommended procedures for accomplishing them by the persons assigned to each task; review the Association's accomplishments for the previous year; and write an evaluation opinion as to the impact of the provisions of the state program of work on vocational educators at the local level.
3. Become a member of the American Vocational Association, review its constitution and bylaws and national convention proceedings, and become familiar with the personnel and functions of the national association. He/she will pass a written examination on the provisions of this objective.
4. Familiarize himself with the legislative programs of the State Vocational Association and the American Vocational Association for the current year of biennium well enough that he/she can successfully pass a written examination on the provisions of this objective conducted by the teacher or counselor educator.
5. Write a term or semester paper on "procedures for Improving and Further Developing Vocational Education" in the area of his/her preparatory program in terms of information obtained in at least five articles appearing in copies of the American Vocational Journal for the current year.

Antonellis, Gerard P. Needs Assessment Package for Advanced Graduate Programs Focused on Career/Occupational Education. (Survey Instrument) 1976

Department of Education, Fitchburg State College

SKILLS AND AREAS OF KNOWLEDGE RELATED TO TEACHING AND COUNSELING

1. (Career Development) Gain a practical understanding of the theories of career development.
2. (Learning Centers) Develop and use "learning centers" in your classroom.
3. (Multi-media) Develop and/or use a variety of multi-media approaches in your classroom.
4. (Inter-disciplinary Planning) Understand and apply practical strategies for integrating your subject content with the subject content of other disciplines.
5. (Evaluation) Develop and/or use student criterion-references tests related to your course content.
6. (Human Relations for Teachers) Understand and apply practical skills for effectively relating to self, to other individuals, and to groups.
7. (Teaching Achievement Motivation) Understand and apply practical strategies for motivating the majority of your students to set high standards, and to pursue these standards energetically.
8. (Communications) Understand and apply practical skills to assist students to freely communicate information, ideas, attitudes, and emotions effectively; commensurate with today's and tommorrow's needs (listening, reading, speaking, and writing).
9. (Value Clarification and Student Decision-making) Understand and apply practical strategies to assist students to a) clarify for themselves what they value, and b) make and implement decisions consistent with the values the students have identified for themselves.
10. (Teacher Behavior in the Classroom) Increase or improve your response repertoire, questioning skills, presentation skills, and student participation skills.
11. (Self-concept) Understand and apply practical strategies to assist students to develop and maintain a healthy self-concept.
12. (Learning Theory - general) Understand and apply the principles and theories of human learning to your classroom situation.
13. (Theories of Learning - Career Development) Understand and apply the principles and theories of human learning to the design and implementation of career education curricula.
14. (World of Work) Be knowledgeable concerning the future of work and projected changes in the work force.
15. (World of Work) Gain a general knowledge of the "World of Work"; and an orientation to and understanding of the social psychological principles related to the "World of Work".
16. (Career/Occupational Education Concepts) Gain a practical understanding of career/occupational education concepts; and a knowledge of the exemplary career education programs currently in existence.
17. (Student Goal-Setting) Understand and apply practical strategies to assist students to realistically assess personal attributes as part of setting life goals.

18. (Team Teaching) Understand and implement practical classroom management strategies for team teaching.
19. (Instructional Units) Develop and implement instructional units incorporating an effective use of large group, small group, and independent study techniques.
20. (Behavioral Modification) Understand and apply effective behavioral modification techniques with students.
21. (Transactional Analysis) Understand and apply the principles of transactional analysis in your classroom situation.
22. (Humanistic Education) Gain a practical understanding of humanistic education techniques.
23. (Leadership Skills and Films) Understand and use films to assist students develop and demonstrate creative problem-solving behaviors.
25. (Individualized Instructional Units - general) Develop and implement learning activity packages, focused on your subject content.
26. (Individualized Instructional Units - Career Development) Develop and implement learning activity packages focused on an integration of concepts in your subject content, with career development concepts.
27. (Performance Objectives - general) Develop and implement performance objectives for your subject content (cognitive, affective, and psychomotor).
28. (Performance Objectives - Career Development) Develop and implement performance objectives focused on an integration of concepts in your subject content, with career development concepts (cognitive, affective, and psychomotor).
29. (Individualized instruction - classroom management) Understand and implement practical classroom management strategies for providing students with a variety of learning activities from which they can choose.
30. (Learning Styles) Understand and apply practical strategies for matching various instructional procedures with individual student's learning styles.
31. (Manipulatives) Provide "hands-on" experiences for students in your subject content.
32. (Career Games and Kits) Develop and/or use career games and kits related to your subject content.
33. (Work Experience) Provide real and/or simulated work experience related to your subject content.
34. (Leadership - Simulations) Assist students in your subject(s) to develop effective decision-making and leadership skills through the use of simulations and role playing experiences.
35. (Community Resources) Understand and apply practical strategies for using the total community as a learning laboratory; and using community resource persons in your classrooms.
36. (Continuous Pro-ress Education) Understand and apply practical strategies for developing, implementing, and monitoring a continuous progress instructional program in your subject(s).
37. (Open Classroom) Understand and apply practical strategies for developing, implementing, and monitoring an "open classroom" instruction program.
38. (Instructional Units) Develop and implement vocational/technical instructional units based on a job description, task analysis, performance objectives, and criterion examination.
39. (Human Development - Occupational Education) Be knowledgeable concerning human development as it affects occupational education at various age levels.

Items 40 - 52;

SUBJECT CONTENT AND CAREER DEVELOPMENT CONCEPTS

Understand and apply practical strategies for incorporating career development concepts into the teaching of:

40. Humanities
41. Science
42. Fine Arts
43. English/Language Arts
44. Mathematics
45. Social Studies
46. Physical Education
47. Vocation/Technical Courses
48. Health Education
49. Foreign Language
50. Home Economics
51. Industrial Arts
52. Business and Distributive Education

Items 53 - 57;

STUDENT AWARENESS AND ACCEPTANCE OF CAREER DEVELOPMENT CONCEPTS

Understand and apply practical strategies to assist students gain an awareness and acceptance that:

53. Self-understanding is vital to career decisions and work performance. Examples of sub-concepts: a) A positive concept of self enables the individual to enter and function in a working world; b) A person's work may contribute to a positive concept of self; c) An individual may be suited to numerous different occupations; d) Value judgements influence vocational choice; e) Others.
54. Man and technology are continually interacting in his work. Examples of sub-concepts: a) Man uses technology to satisfy his needs and to achieve his desires; b) Technological developments cause a continual change in the emergence and disappearance of jobs; c) Technology has unlimited implications for man's work and leisure time; d) Man must learn to use technology to his advantage; e) Others.
55. Man's livelihood depends upon the production, distribution, and consumption of goods and services. Examples of sub-concepts: a) Man's work contributes to a nation's wealth and productivity; b) Economic fluctuations influence occupational choice and opportunity; c) Man's work affects his standard of living; d) Others.
56. Society reflects the creative force of work. Examples of sub-concepts: a) Society is dependent upon the work of many people; b) The customs, traditions, and attitudes of society affect the world of work; c) Societal needs determine vocational opportunity; d) Others.
57. Career education prepares man for the world of work. Examples of sub-concepts: a) Each person needs to be recognized as having dignity and worth; b) Career development is a continuous process, and requires a continuous series of choices; c) Hobbies and interests may lead

57. (cont'd)
57. to a vocation or avocation; d) There is a wide variety of careers which
cont. may be classified in several ways; e) There are job clusters within occupational areas, as well as, across occupational areas; f) Education and work are interrelated; g) Individuals are responsible for their career planning; h) There is no single "best" motive for choosing a career plan; i) Vocational preparation requires skills development; j) Workers may need vocational retraining in the course of a lifetime; k) Others.

LEARNING GOALS FOR CAREER DEVELOPMENT

Understand and apply practical strategies to assist each student to:

58. Assess his/her interests, abilities, values, needs and other self characteristics, as they relate to occupational roles.
59. Explore broad occupational areas in terms of opportunities, potential satisfactions, required roles of workers and other related dimensions.
60. Explore the psychological meaning of work and its value in the human experience
61. Understand modern work environments.
62. Possess an awareness that the individual's role in work is tied to the well-being of the community.
63. Demonstrate effective decision-making skills in striving to achieve occupational goals.
64. Acquire a concept of self as a productive person in an achievement-oriented society.

SKILLS AND AREAS OF KNOWLEDGE RELATED TO ADMINISTRATION AND SUPERVISION

GENERAL PROFESSIONAL SKILLS AND UNDERSTANDINGS

65. (Career Development) Gain a practical understanding of the theories of career development.
66. (Value Clarification and Decision-making) Understand and apply practical strategies to a) clarify for yourself what you value, and b) make and implement decisions consistent with these identified values.
67. (Learning Theory - general) Gain a practical understanding of the theories of learning.
68. (Theories of Learning - Career Development) Understand and apply the principles and theories of human learning to the design and implementation of career education curricula.
69. (World of Work) Be knowledgeable concerning the future of work and projected changes in the work force.
70. (World of Work) Gain a general knowledge of the "World of Work"; and an orientation to and understanding of the social psychological principles related to the "World of Work".
71. (Career/Occupational Education Concepts) Gain a practical understanding of career/occupational education concepts; and a knowledge of the exemplary career education programs currently in existence.
72. (Transactional Analysis) Understand and apply the principles of transactional analysis in your role as a supervisor.
73. (Innovative Practices) Understand and apply practical strategies to initiate and implement such innovative practices as flexible scheduling; the nongraded school, continuous progress education; others.

74. (Community Resources) Understand and apply practical strategies for developing and implementing a comprehensive program for using the total community as a learning laboratory; and using community resource persons in the school (also including work study programs and cooperative education programs).
75. (Human Development - Occupational Education) Be knowledgeable concerning human development as it affects occupational education at various age levels.
76. (Proposal Development) Develop proposals for state and federal programs.
77. (Involvement of Other Agencies) Plan for the active cooperation of various agencies such as industry, government, medicine and the like.
78. (Human Relations - Supervisor) Understand and apply practical skills for effectively relating to self, to other individuals, and to groups.
79. (Special Education - Mainstreaming) Understand and apply practical strategies for implementing instructional programs for the exceptional child; including mainstreaming.
80. (Leadership Style) Understand and apply practical strategies for identifying your own leadership style; and initiating effective leadership behavior.
81. (Conflict Resolution) Understand and apply successful conflict resolution strategies.
82. (Communication Skills - Supervisor) Develop effective communication skills (listening, speaking, and writing).
83. (Creative Problem-solving) Understand and apply practical strategies for enhancing individual and group creative problem-solving.
84. (Leadership - Group Behavior) Understand and apply practical strategies for identifying helpful and dysfunctional behaviors while working in groups.
85. (Delegating and Use of Time) Use your time effectively, and develop the skill of delegating.
86. (Organizational Development) Gain a practical understanding of the social psychological aspects of organizational development; especially as it relates to the school system.
87. (Basic Concepts of Vocational Education) Gain a practical understanding of basic concepts of vocational education.
    Examples: a) Be familiar with organizational structures and various forms of vocational education in the U.S.; b) Be knowledgeable of the history of vocational education in the U.S.; c) Be familiar with the general certification, legal, and administrative status of vocational education in general; d) Be aware of contemporary issues affecting vocational education; e) Others.

PROFESSIONAL HELPING SKILLS

88. (Creativity) Assist teachers develop and demonstrate creative problem-solving behaviors.
89. (Performance Objectives - Career Development) Assist teachers develop and implement performance objectives focused on an integration of concepts in their subject content, with career development concepts (cognitive, affective, and psychomotor).
90. (Innovative Practices - general) Assist teachers to initiate and maintain such innovative practices as flexible grouping; team teaching; open space instruction; continuous progress education; humanistic education; learning centers; inter-disciplinary planning; open-classroom; mini-courses;

90. (cont'd)
use of student criterion-referenced tests; behavioral modification techniques; and others.

91. (Teacher Behavior in the Classroom) Assist teachers increase or improve their response repertoire, questioning skills; presentation skills; and student participation skills.

92. (Instructional Units) Assist teachers to develop and implement instructional units incorporating an effective use of large group, small group, and independent study techniques.

93. (Individualized Instruction - Classroom Management) Assist teachers to implement practical classroom management strategies for providing students with a variety of learning activities from which they can choose.

94. (Learning Styles) Assist teachers to apply strategies for matching various instructional procedures and learning modes, with individual student's learning rate, interests, abilities, and learning styles.

95. (Career Games and Kits) Assist teachers develop and/or use career games and kits related to their subject content.

96. (Manipulatives) Assist teachers provide "hands-on" experiences for students in their courses.

97. (Work Experience) Assist teachers provide real and/or simulated work experience for the students in their courses.

98. (Simulations - Leadership Skills) Assist teachers develop and/or use simulations and role playing experiences for developing student leadership skills.

99. (Instructional Units) Assist teachers develop and implement vocational/technical instructional units based on a job description, task analysis, performance objectives, and criterion examination.

100. (Course Content and Career Development Concepts) Assist teachers to incorporate career development concepts into the teaching of their subject content.

101. (Multi-media) Assist teachers to make proper use of media and technology in the teaching-learning process.

102. (Human Relations - Teachers) Assist teachers to effectively relate to themselves, to other individuals, and to groups.

103. (Communications - Students) Assist teachers to teach students to freely communicate information, ideas, attitudes, and emotions effectively (listening, reading, speaking, and writing).

104. (Self Concept - Students) Assist teachers apply to practical strategies for enhancing the self concept of their students.

LEADERSHIP AND MANAGEMENT SKILLS RELATED TO BUILDING LEVEL ACTIVITIES

105. (Instructional Leadership) Understand and apply practical strategies for initiating and maintaining the environment for instructional improvement and change.
Examples of sub-skills: a) Demonstrate a knowledge of change theory; b) Analyze the climate for changes in a given organizational setting; c) Demonstrate a knowledge of how to proceed for a planned instructional change; d) Demonstrate a knowledge of current innovative practices nationwide, statewide and locally; e) Assist individual teachers and groups of teachers in planning, implementing, and evaluating teacher-initiated change; f) Others.

106. (Instructional Leadership) Understand and apply practical strategies for initiating and maintaining the environment for curriculum improvement. Examples of sub-skills; a) Demonstrate a knowledge of current curriculum trends; b) Demonstrate a knowledge of the student population for which you are responsible, and how the new trends relate to this given population; c) Develop and implement a strategy for the involvement of a given community in curriculum improvement; d) Motivate staff to implement a curriculum improvement; e) Demonstrate a knowledge of methods for evaluating curriculum changes; f) Others.

107. (Personnel Leadership) Understand and apply practical strategies for effectively recruiting, selecting and assigning professional and non-professional staff members. Examples of sub-skills: a) Obtain and utilize applications from a variety of educational personnel resources; b) Identify and use sources which provide applicants representative of multi-ethnic and/or multi-racial backgrounds; c) Conduct interviews to effectively evaluate candidates; d) Use staff resources to assist in personnel selection; e) Prepare a complete job analysis of all available staff positions; f) Make assignments of staff in line with identified capabilities; g) Others.

108. (Leadership in Community Relations) Understand and apply practical strategies for identifying community needs, translating these needs into programs, assessing the community's response to the programs, and raising the community's expectations of the educational programs. Examples of sub-skills: a) Develop strategies and implement programs designed to keep the community informed of activities and programs in the school; b) Identify and analyze community characteristics such as social class, community power structure, cultural values, interest groups and pressure groups; c) Outline the elements of a community survey instrument; d) Identify educational needs indigenous to the community and pupil population; e) Propose educational programs appropriate to identified community needs; f) Organize, maintain, and strengthen liaison with parent-teacher groups, citizen's advisory groups, influential individuals and groups, public relations services, and the mass media; g) Inform parents on an ongoing basis as to new philosophies in the educational world; h) Involve parents in school programs; i) Others.

109. (School Management: Building Level) Understand and apply strategies for the effective operation of the school within the law and safety standards. Examples of sub-skills: a) Demonstrate a knowledge of the basic principles of school law, specific legal mandates, and decisions of the courts as they apply to your responsibilities in such areas as pupil attendance, curriculum, personnel administration, plant operation and safety; b) Demonstrate a knowledge of the legal responsibilities, policies and directives of the Board of Education and the Superintendent of Schools; c) Demonstrate a knowledge of the legal rights and responsibilities of the teacher, student, and parent; d) Demonstrate a knowledge of safety regulations with respect to equipment and supplies employed in the school program; e) Interpret existing state law and school district policies and regulations with respect to safety to staff, students, and community; f) Others.

110. (School Management: Building Level) Understand and apply practical strategies for the effective fiscal operation of the school. Examples of sub-skills: a) Demonstrate a knowledge of the components of a budget, budget preparation and control, accounting procedures, purchasing and inventory procedures; b) Identify the essentials of such

110. (cont'd)
supporting sources as transportation, food service, data processing, school building planning, operation and maintenance, and insurance; c) Prepare with your staff and the central administration, the school budget; d) Operate the program within budget limitations; e) Maintain fiscal records and files and appropriate financial reports; f) Others.

111. (Personnel Management: Legal) Understand and apply practical strategies for evaluating staff and maintaining appropriate personnel records.
Examples of sub-skills: a) Keep appropriate records of observation reports; b) Evaluate staff members in terms of their performance; c) Utilize an efficient means of maintaining personnel records; d) Make appropriate decisions concerning separation or retention of probational teachers and granting tenure, in accordance with district regulations and union contracts; e) Know and use the appeal processes designed to safeguard employee rights; f) Demonstrate knowledge of district regulations and teachers bargaining contract with regard to retention and dismissal; g) Others.

112. (Planning, Programming, and Budgeting Systems) Understand and apply practical strategies for initiating, implementing, and maintaining an educational planning, programming, and budgeting system (PPBS).
Examples of sub-skills: a) Recruit and train task team; b) Prepare district planning and implementation schedule; c) Prepare communications plan; d) Prepare district training program; e) Develop program structure; f) Develop program accounting; g) Prepare objectives (and prioritize the objectives); h) Develop evaluation plan; i) Prepare multi-year financial plan; j) Apply program analysis (alternative ways of achieving the objectives are considered); k) Prepare PPBS document.

113. (Mutual Goal Setting: School Management-by-Objectives) Understand and apply practical strategies for initiating, implementing, and maintaining a performance objectives approach to teacher appraisal.
Examples of sub-skills: With the mutual cooperation of the teacher a) Specify the performance criteria (standards); b) Develop the performance objectives or job targets; c) Decide on the performance activities; d) Develop and implement procedures for monitoring the performance; e) Assess the monitored data; f) Conduct evaluation post-conference and follow-up activities.

114. (Implementing Career Education) Understand and apply practical strategies for executing the action steps for implementing a comprehensive career/occupational education program.
Examples of sub-skills: a) Organize an interactive network of interested groups; b) Gain an understanding or career/occupational education, and establish it as a high-priority objective; c) Study the current educational system to determine the changes necessary to incorporate into it a true career/occupational education system; d) Conduct an inventory and marshal community resources; e) Design preliminary programs of career/occupational education; f) Establish a cooperative relationship among the participating organizations, institutions, and individuals; g) Implement the system; h) Develop a program evaluation; i) Create a feedback system to use evaluation findings to improve career education programs; j) Make provisions for a program of maintenance to sustain the vital parts of the system.

115. (Personnel Leadership; Staff Morale) Understand and apply practical strategies for initiating, maintaining, and continually promoting good staff morale.
Examples of sub-skills: a) Demonstrate skills in diagnosing staff morale; b) Demonstrate a practical knowledge of the theories of motivation; c) Provide for an open line of communication; e) Demonstrate knowledge and skill in interpersonal relations; g) Conduct effective individual conferences with staff, and offer constructive criticism and recommendations for improvement; h) Others.

116. (Instructional Leadership) Understand and apply practical strategies for providing for continuous assessment of instructional processes and programs.
Examples of sub-skills: a) Demonstrate the interrelationship of overall educational philosophies and objectives to the ongoing operation of the school; b) Execute an assessment plan that relates to ongoing decisions and actions of the school; c) Demonstrate the importance of educational philosophy in the preparation of general and specific objectives; d) Establish ways in which to involve students in the evaluation of instructional programs; e) Locate and obtain commercial instruments to evaluate your objectives; f) Construct instruments and data collection procedures which will insure valid and reliable measurement of objectives; g) Others.

117. (Instructional Leadership) Understand and apply practical strategies for assisting the instructional staff in providing appropriate instructional programs for each student.
Examples of sub-skills: a) Demonstrate knowledge of innovative techniques designed to promote a cooperative approach to the observation and analysis of classroom instruction and the "clinical" approach to supervision; d) Outline an inservice education program for professional paraprofessional personnel in your school; e) Establish procedures for staff needs assessment; f) Establish cooperative procedures for providing resources which may be available to the staff; g) Establish teams of professional and community members who will, in conjunction with the student, determine instructional program alternatives for each student; h) Establish procedures for determining whether each selected student's program includes individually prescribed and/or approved objectives, resources, activities, small group instruction, self-assessment techniques and a student-teacher determined evaluation; i) Others.

ROUTINE ADMINISTRATIVE FUNCTIONS RELATED TO DISTRICT-WIDE ACTIVITIES

118. (School Plant and Services) Understand and apply practical strategies for the district-wide programming and monitoring of school plant and services functions.
The Functions: a) Plant planning, construction, operation, and maintenance; b) grounds maintenance; c) site acqusition; d) library operations; e) plant safety; f) sub operations; g) transportation safety; h) school lunch; h) others.

119. (Finance and Business Management) Understand and apply practical strategies for the district-wide programming and monitoring of finance and business management functions.
The Functions: a) Budget construction, control, and administration; b) debt service administration; c) payroll administration; d) supervising and auditing internal accounts; e) insurance administration; f) specifications for equipment and supplies; g) purchasing equipment and supplies;

119. (cont'd)
h) handling state and/or federal support programs; i) others.

120. (Pupil Personnel Administration) Understand and apply practical strategies for the district-wide programming and monitoring of pupil personnel functions. The Functions; a) Orientation of pupils; b) scheduling of pupils; c) pupil counseling; d) student health; e) student attendance; f) student census; g) student guidance; h) student records; i) assessing student progress; j) student activities; k) occupational information services; l) placement services; m) dealing with pupil irregularities; n) others.

121. (School-Community Relations) Understand and apply practical strategies for the district-wide programming and monitoring of school-community relations functions.
The Functions: a) Information services to community; b) information services to mass media; c) handling requests for information; d) reporting pupil progress; e) use of school facilities for nonschool groups; f) others.

122. (Curriculum and Instruction) Understand and apply practical strategies for the district-wide programming and monitoring of instruction and curriculum functions.
The Functions: a) Establishing curricular content and organization; b) selecting curricular materials; c) relating curriculum to time, facilities, and personnel; d) articulating existing programs; e) exceptional children; f) remedial instruction; g) testing; h) instructional improvement; i) diagnosing pupil learning difficulties; j) adult education; k) use of instructional equipment; l) others.

123. (Staff Personnel Administration) Understand and apply practical strategies for the district-wide programming and monitoring of staff personnel functions. The Functions: a) Recruitment, selection, induction, orientation, scheduling. supervision, evaluation, promotion, retention, and dismissal of professional and nonprofessional staff personnel; b) inservice education or professional and nonprofessional staff personnel; c) maintenance of staff personnel records; d) dealing with irregularities in relation to staff personnel; e) others.

Stephen Austin State University, Nacogdoches, Texas. Project in Career Education, Program Narrative; Final Report. 1976

JOB DESCRIPTIONS

Director

1. Select and recommend all personnel employed in the project.
2. Train and orient all project personnel.
3. Authorize and account for all project expenditures.
4. Monitor project objectives to determine implementation on schedule.
5. Insure that evaluation and reporting procedures are carried out as outlined in the proposal.
6. Supervise project personnel in carrying out duties as prescribed in project.

ASSOCIATE DIRECTOR RESPONSIBILITIES

7. Supervise the business affairs of the project.
8. Organize the instructional resource center.
9. Act as Career Education Coordinator for the Longview and Nacogdoches centers.
10. Maintain continuous coordination with the Career Education Coordinators in Alief and Duncanville.

PROFESSORS OF CAREER EDUCATION

11. Identify twenty-five (25) outstanding teachers who can produce, teach, and demonstrate outstanding modules and media in Career Education to educators and the public.
12. Give and secure assistance for these taachers in module development. Assistance will come from project staff, service center, the school district and the community.

13. Present Career Education Awareness information to appropriate classes in curriculum, supervision, administration, and pre-service training.
14. Complete appropriate evaluation instruments.

CAREER EDUCATION COORDINATORS

15. Work with administration of selected schools to identify teachers who are working in Career Education projects, and give special assistance to these teachers.
16. Give special assistance and support to the 100 demonstration teachers.
17. Support in items 1 and 2 above means focusing resources from SFA, the service center, the community, and the school district on the efforts of the individual teachers.
18. Makes awareness presentations to school personnel and to the community personnel.
19. The coordinator will be active in establishing a working relationship between the school and such organizations as hospitals, industries, labor, civic clubs, and other interested groups.
20. Will facilitate the participation of demonstration teachers in the conduct of awareness sessions and other forms of sharing.
21. Will organize Career Education teams in schools with demonstration teachers as leaders.

GUNDERSON, Orley D., and others,
PROFESSIONAL EDUCATION COMPETENCIES OF COMMUNITY COLLEGE INSTRUCTORS,
OREGON STATE UNIVERSITY, Corvallis, Division of Vocational, Adult
and Community College Education, July, 1971. VTO 13608.

Common Professional Education Competencies of Community College Vocational Instructors

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Factor I

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1. Adapt your appearance and apparel to acceptable standards for instructors.
2. Maintain student performance or progress records.
3. Adhere to the code of ethics adopted in your community college.
4. Interpret the philosophy of the community college in providing vocational programs for the student.
5. Select textbooks and instructional materials for the classroom, shop or laboratory.
6. Motivate students in the classroom, shop or laboratory.
7. Interpret your vocational program to others.
8. Provide appropriate practice for development of basic skills.
9. Interpret the objectives of vocational education to others.
10. Maintain a clean, orderly laboratory or classroom.
11. Maintain student attention during classroom presentations or demonstrations.
12. Identify students in need of counseling or guidance.
13. Participate in professional organizations related to your subject matter area.
14. Maintain discipline in the classroom, shop or laboratory.

15. Participate in outside trade, business, or professional organizations related to your subject matter area.

16. Inform students of the nature and requirements of specific occupations.

17. Work cooperatively with people in the community.

18. Make us of available guidance and counseling services within the community college.

19. Be stimulating in your work as an instructor.

20. Interpret safety rules and regulations to students.

Factor II

21. Interpret the provisions of instructor tenure laws.

22. Interpret the innovative provisions of the Vocational Act as amended in 1968.

23. Interpret the goals and objectives of vocational education.

24. Interpret the goals of general education.

25. Interpret the history of vocational education.

26. Interpret state certification requirements for instructors.

27. Locate available standardized tests.

28. Interpret the state specifications and requirements for vocational facilities.

29. Interpret the philosophy of the comprehensive community college.

30. Interpret the legal liabilities of a teacher.

31. Direct, advise, or promote student participation in competitive events or youth organizations related to vocational education.

32. Use the State Plan for Vocational Education in securing reimbursement for vocational programs.

33. Interpret the history of education.

34. Identify the similarities and differences between the goals of general and vocational education.

35. Distinguish between two or more educational philosophies.

36. Interpret the socio-economic class structure of the local community in relation to students enrolled in vocational programs.

37. Interpret community college politics.

Factor III

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38. Conduct a shop or laboratory demonstration for an individual student.

39. Provide practical shop or laboratory experience to enhance classroom learning.

40. Develop audio-visual materials for instructional purposes.

41. Utilize individualized instruction materials and techniques.

42. Relate the course of study to measurable performance objectives.

43. Develop classroom instruction based upon the individual needs of the learner.

44. Provide appropriate practice for development of basic skills.

45. Write performance objectives.

46. Teach at the student's level and rate of learning.

47. Utilize written shop, classroom and laboratory equipment organizational plans.

48. Use a student-centered teaching style.

49. Develop performance tests to measure achievement.

50. Develop student learning activities to facilitate instructions.

51. Use programmed learning materials.

Factor IV

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52. Aid the student in obtaining job placement after training.

53. Secure on-the-job training positions for students.

54. Use the State Plan for Vocational Education in securing reimbursement for vocational programs.

55. Use the results of standardized test scores for job placement.

56. Provide programs for the student with special needs.

57. Write articles for news releases.

58. Conduct follow-up studies for purposes of determining effectiveness of instruction.

59. Screen and select students for your program.

60. Coordinate and supervise cooperative work experience programs.

Factor V

61. Assist in the development of the total community college program.

62. Interpret the philosophy of the comprehensive community college.

63. Draw from personal vocational interests to enrich instruction.

64. Relate the vocational program to other instructional programs.

Factor V

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65. Aid students in entering educational or occupational training porgrams beyond the community college level.

66. Communicate your ideas or point of view to other instructors or administrators.

67. Relate current events associated with your subject matter area to classroom instruction.

68. Articulate your instructional program with other educational institutions or agencies.

Factor VI

69. Assist community college administrators initiate and maintain vocational programs.

70. Prepare budgetary requests for vocational programs.

Hansen, L. Sunny, Career Education: Teachers' Responsibilities, ERIC Series 93, VT 020381, Columbus, Ohio: The Center for Vocational and Technical Education, 1973.

A current position paper on career development, prepared by a joint commission of the American Vocational Association and the National Vocational Guidance Association (1973), outlines distinct functions for various educators, including administrators, academic teachers, vocational teachers, counselors, parents, and community. While it gives strong leadership to the guidance specialist, it suggests the following responsibilities for academic and vocational teachers.

The vocational teacher should:

1) Provide realistic educational and occupational information to students and staff based on knowledge of their occupational field and continuous contact with workers and work settings.

2) Identify and recruit resource persons in the employment community to assist in the school program.

3) Provide exploratory experiences in vocational classrooms, labs, and shops for students not enrolled in occupational preparation programs, and assist those teachers who wish to incorporate "hands on" types of activities in their courses.

4) Identify basic and academic skills and knowledge that are needed to succeed in the occupations of their field and communicate this information to academic teachers and gudiance specialists.

5) Assist academic teachers and guidance specialists in designing appropriate occupational exploration experiences.

6) Provide students with information about vocational offerings and guidance specialists with information about the kinds of careers for which students are prepared.

7) Assist students enrolled in vocational programs to analyze and interpret their learning experiences for better understanding of self in relation to occupations and the world of work.

8) Plan and provide vocational instruction which prepares students to enter, adjust, progress, and change jobs in an occupational field.

9) Assist students in identifying a wide range of occupations for which their vocational instruction is applicable.

10) Encourage employers to assist in expanding student awareness of career opportunities.

11) Arrange observation activities or part-time employment for students and school staff to help them learn more about occupations and work settings.

12) Participate in the planning and implementation of a comprehensive career education program ("Position Paper on Career Development," 1973: 14-15).

The academic teacher should:

13) Provide for easy transition of students from home to school, from one school environment to the next, and from school to further education or employment.

14) Provide students with curriculum and related learning experiences to insure the development of basic concepts of work and the importance of those who perform work.

15) Provide group guidance experiences, with appropriate aid from the guidance specialists and vocational educators to regularly demonstrate the relationship between learning and job requirements.

16) Help parents understand and encourage the career development process as it relates to their children.

17) Provide opportunities within the curriculum for students to have decision-making experiences related to educational and vocational planning.

18) Assist the student in synthesizing of his accumulated career development experiences to prepare him for his ongoing educational transitions.

19) Provide career exploratory experiences to help students gain an understanding of worker characteristics and work requirements.

20) Provide experiences to help students increase their depth of understanding of personal capabilities, interests and possible limitations.

21) Provide for career preparation experiences sufficient to enable the individual to acquire [sic] skills necessary for entering and remaining in the world of work at a level appropriate to capabilities and expectations.

22) Provide, as an extension of the in-school learning experience, opportunities for the individual to experience work first-hand in a non-threatening environment ("Position Paper on Career Development," 1973: 15-16).

In another document, Hoyt identifies seven responsibilities of the classroom teacher. The classroom teacher is expected to:

23) ...embrace and adopt the basic assumptions and goals of career education for themselves...and dedicate a portion of their efforts towards accomplishment of these goals....

24) ...become aware of and knowledgeable concerning the career implications of the substantive content they seek to help students learn....

25) ...seek out and capitalize on the wide variety of means available for emphasizing the career implications of the substantive content he seeks to help the students learn....

26) ...emphasize career implications in ways that will bring dignity to all honest work and to all persons who perform such work....

27) ...emphasize career implications as a means of motivating students to learn more of the substantive content the teacher is attempting to teach....

28) ...seek out and capitalize on cooperative projects involving the efforts of several teachers, or even the entire teaching staff....

29) ...work cooperatively with those charged with responsibility for other components of career education (Bottoms, et al., 1972: 7-10)....

Senior High 30) assist in clarifying the career decision process in relation to self.

31) help the student become aware of preferred life styles.

32) help the student reality-test his self-concept through tryout experiences.

33) continue to teach the vocational and avocational aspects and implications of school subjects, including the structure of the subject, the structure of related career fields, possible college majors or vocational specialities, and educational or vocational paths.

34) Identify ways in which the student can gain work experience.

35) identify, use, and adapt resources appropriate for this level.

36) convey to each student that he or she is a worthwhile person whatever his occupational or educational goals or life-style aspirations (1972b: 15-16).

Common teacher functions mentioned by several writers (Jones et al., 1972; Hoyt, 1972; Drier, 1972b; Hansen, 1972a; "Position Paper on Career Development," 1973; Swain, 1971) include: (1) needs assessment; (2) curriculum writing; (3) relating subjects to career; (4) greater teacher responsibility in counseling and guidance; (5) creating learning activities, units and courses; (6) utilizing school and community resources, e.g., worker interviews and field visits; (7) creating special programs for special needs; (8) assuming special in-service system and building responsibilities; (9)

A Study of the Career Education Competencies Considered Needed by Elementary and Junior High School Teachers in Selected Schools in Oregon, Holloway, Richard Eugene, Doctoral dissertation, Oregon State University, 1973.

Fifty competencies in rank order of importance as to the proficiency elementary teachers should have.

1. Identify the careers represented among the parents of your students.
2. Utilize learning activities that foster wholesome attitudes regarding the worth and function of work in all fields at all levels.
3. Understand the total career education program within your school district and identify your role in the total program.
4. Help students realize that responsibility and decision making are part of career development.
5. Identify people in the local community who are willing to talk to students about their occupations and keep a directory of contacts made.
6. Direct students in analyzing the direct relationship between competencies developed while in school and those needed in occupations as well as in citizen, vocational and family life roles.
7. Discuss with students the interdependence of occupations and how all work contributes to the effective functioning and well-being of society.
8. Utilize selected resource people in class to present career information closely allied to their occupational specialties.
9. Identify career awareness and/or exploratory resource material such as A.V. material, games, literature, etc.
10. Discuss and illustrate for students how people in various occupations also function in other life roles as well. (i.e., a citizen, family member and user of leisure time).
11. Conduct field trips for career awareness and/or exploration.
12. Direct students in identifying the tasks performed by people in various occupations.
13. Evaluate for classroom application, various sources of career information.
14. Involve the parents of class members in presenting information on their career.
15. Utilize career awareness and/or exploratory resource materials such as A.V. material, games, literature, etc.
16. Identify resources and/or services available from the community for enriching the career awareness and/or exploration programs.

17. Direct students in identifying careers that require some form of higher education.

18. Utilize career awareness and/or exploratory resource material such as A.V. material games, literature, etc.

19. Direct students in analyzing the career cluster job family concept.

20. Evaluate for classroom application, various sources of career information.

21. Direct students in identifying the tasks performed by people in various occupations.

22. Utilize career awareness and/or exploration teaching guides that have been developed.

23. Identify career awareness and/or exploratory resource material such as A.V. material, games, literature, etc.

24. Discuss and illustrate for students how people in various occupations also function in other life roles as well. (i.e. as citizen, family member and user of leisure time).

25. Establish and maintain working relationships with local business, industrial and labor personnel in developing and improving career awareness and/or exploratory programs.

26. Identify appropriate measuring devices for students to use in assessing their interests, attitudes and aptitudes as they relate to future career decisions.

27. Utilize "hands-on" or applied classroom projects in which the tasks of real workers are simulated.

28. Direct students in studying the occupations involved in the day-to-day operations of your local school system.

29. Utilize appropriate measuring devices to guide students in a self-understanding of their interests, attitudes and aptitudes as they relate to future career decisions.

30. Utilize individualized instruction material developed for use in career awareness and/or exploration.

31. Utilize vocational literature and data for class assignments.

32. Direct students in obtaining information on manpower from the local state employment services.

33. Work with guidance and counseling staff to implement and improve the career awareness and/or exploration program.

34. Direct students in using classified ads to identify and describe occupations.

35. Direct students in using the Dictionary of Occupational Titles (D.O.T.) to identify and describe occupations.

36. Direct students in identifying those vocations that can become avocations and avocations that can and have become vocations.

37. Distinguish for students relationships between occupations and avocations.

38. Direct students in developing a questionnaire appropriate for interviewing parents and others about what they do in their jobs.

39. Direct students in making a task analysis of their parent's occupation or of others that are of special interest.

40. Utilize developed tests that measure the achievement of career awareness and/or exploratory objectives.

41. Direct students in identifying the salary levels and working conditions of various occupations studied in subject matter units covered in class.

42. Involve the parents of class members in presenting information on their career.

43. Identify available tests that measure the achievement of career awareness and/or exploratory objectives.

44. Identify for classroom application the national, regional, and local manpower trends and needs.

45. Direct students in assessing the life styles associated with various occupations.

46. Develop tests that measure the achievement of career awareness and/or explatory objectives.

47. Identify the careers represented among the parents of your students.

48. Direct students in analyzing how social interactions differ among various careers.

49. Direct students in identifying the type of tools, clothes, material and equipment used by people in various occupations.

50. Understand and apply various theories of career development (e.g. theories of Super, Holland, etc.)

Fifty competencies in rank order of importance as to the proficiency junior high teachers should have.

51. Help students realize that responsibility and decision making are part of career development.

52. Help students recognize advantages of career planning.

53. Identify resources and/or services available from the community for enriching the career awareness and/or exploration programs.

54. Utilize learning activities that foster wholesome attitudes regarding the worth and function of work in all fields at all levels.

55. Identify for students the career opportunities related to subject matter units covered in class.

56. Discuss with students the interdependence of occupations and how all work contributes to the effective functioning and well-being of society.

57. Direct students in doing research on occupations that are of interest to them.

58. Utilize selected resource people in class to present career information closely allied to their occupational specialties.

59. Direct students in analyzing the direct relationship between competencies developed while in school and those needed in occupations as well as in citizen, avocational and family life roles.

60. Direct students in identifying the physical and intellectual requirements of occupations related to subject matter units covered in class.

61. Identify people in the local community who are willing to talk to students about their occupations and keep a directory of contacts made.

62. Understand the total career education program within your school district and identify your role in the total program.

63. Direct students in identifying occupations that are compatible with their interests and abilities.

64. Direct students in identifying careers that require some form of higher education.

65. Provide for student discussion of their career aspirations.

66. Conduct field trips for career awareness and/or exploration.

67. Direct students in identifying careers that require a high school diploma or a GED.

68. Utilize career awareness and/or exploration teaching guides that have been developed.

69. Direct students in studying the occupations involved in the day-to-day operations of your local school system.

70. Direct students in identifying the physical and intellectual requirements of occupations related to subject matter units covered in class.

71. Direct students in identifying occupations that are compatible with their interests and abilities.

72. Distinguish for students relationships between occupations and avocations.

73. Identify for students the career opportunities related to subject matter units covered in class.

74. Direct students in developing a questionnaire appropriate for interviewing parents and others about what they do in their jobs.

75. Direct students in doing research on occupations that are of interest to them.

76. Direct students in analyzing the career cluster job family concept.

77. Direct students in making a task analysis of their parent's occupation or of others that are of special interest.

78. Direct students in analyzing how social interactions differ among various careers.

79. Provide for student discussion of their career aspirations.

80. Utilizer "hands-on" or applied classroom projects in which the task of real workers are simulated.

81. Identifying those vocations that can become avocations and avocations that can and have become vocations.

82. Direct students in identifying the type of tools, clothes, material and equipment used by people in various occupations.

83. Work with guidance and counseling staff in implement and improve the career awareness and/or exploration program.

84. Help students recognize advantages of career planning.

85. Identifying careers that require a high school diploma or a GED.

86. Utilize vocational literature and date for class assignments.

87. Establish and maintain working relationships with local business, industrial and labor personnel in developing and improving career awareness and/or exploratory programs.

88. Utilize individualized instruction material developed for use in career awareness and/or exploration.

89. Utilize developed tests that measure the achievement of career awareness and/or exploratory objectives.

90. Direct students in assessing the life-styles associated with various occupations.

91. Direct students in using classified ads to identify and describe occupations.

92. Utilize appropriate measuring devices to guide students in a self-understanding of their interests, attitudes and aptitudes as they relate to future career decisions.

93. Identify available tests that measure the achievement of career awareness and/or exploratory objectives.

94. Direct students in identifying the salary levels and working conditions of various occupations studied in subject matter units covered in class.

95. Develop tests that measure the achievement of career awareness and/or exploratory objectives.

96. Using the Dictionary of Occupational Titles (D.O.T.) to identify and describe occupations.

97. Identify appropriate measuring devices for students to use in assessing their interests, attitudes and aptitudes as they relate to future career decisions.

98. Direct students in obtaining information on manpower trends and needs from the local state employment services.

99. Identify for classroom application the national, regional and local manpower trends and needs.

100. Understand and apply various theories of career development (e.g., theories of Super, Holland, etc.)

PERSONNEL COMPETENCIES IN THE IMPLEMENTATION OF CAREER AND OCCUPATIONAL PROGRAMS

Joyce Malyn-Smith, Boston University, Boston, unpublished, 1976. See individual references on page 316.

In implementing a program of Career/Occupational Education the Senior High Teacher should:

1. assist in clarifying the career decision process in relation to self (Hansen)
2. help the student become aware of preferred life styles (Hansen)
3. help the student reality-test his self-concept through tryout experiences (Hansen)
4. continue to teach the vocational and avocational aspects and implications of school subjects, including the structure of the subject, the structure of related career fields, possible college majors or vocational specialitites, and educational or vocational paths (Hansen)
5. identify ways in which the student can gain work experience (Hansen)
6. identify, use and adapt resources appropriate for this level (Hansen)
7. convey to each student that he or she is a worthwhile person whatever his occupational or educational goals or lifestyle aspirations (Hansen)

In implementing a program of Career/Occupational Education the Department Head should:

8. supervise infusion of Career Education and Occupational Education materials into existing curriculum
9. assist teachers in implementation of Career/Occupational Education programs
10. provide lists of available materials and resources to the teachers as relates to their specialization

In implementing a program of Career/Occupational Education the Academic Teacher should:

11. provide for easy transition of students from one school environment to the next, and from school to further education or employment (Tennyson 1973)

12. provide students with curriculum and related learning experiences to insure the development of basic concepts of work and the importance of those who perform work (Tennyson)

13. provide group guidance experiences to regularly demonstrate the relationship between learning and job requirements (Tennyson)

14. help parents understand and encourage the career development process as it relates to their children (Tennyson)

15. provide opportunities within the curriculum for students to have decision-making experiences related to educational and vocational planning (Tennyson)

16. assist the student in synthesizing of his accumulated career development experiences to prepare him for his ongoing educational transitions (Tennyson)

17. provide career exploratory experiences to help students gain an understanding of worker characteristics and work requirements (Tennyson)

18. provide experiences to help students increase their depth of understanding of personal capabilities, interests and possible limitations (Tennyson)

19. provide for career preparation experiences sufficient to enable the individual to acquire skills necessary to succeed at his chosen occupation within his capabilities (Tennyson)

20. provide opportunities for the individual to experience work first hand in a non-threatening environment (Tennyson)

21. refer students to Vocational Education teachers and Counselors for additional career information

In implementing a program of Career/Occupational Education the Vocational Teacher should:

22. provide realistic educational and occupational information to students and staff based on konwledge of their occupational field and continuous contact with workers and work settings (Tennyson)

23. identify and recruit resource persons in the employment community to assist in the school program (Tennyson)

24. provide exploratory experiences in vocational classrooms, labs, and shops for students not enrolled in occupational preparation programs, and assist those teachers who wish to incorporate "hands-on" types of activities in their courses (Tennyson)

25. identify basic and academic skills and knowledge that are needed to succeed in the occupations of their field and communicate this information to academic teachers and guidance counselors (Tennyson)

26. provide students with information about vocational offerings and guidance specialist with information about the kinds of careers for which students are prepared (Tennyson)

27. assist academic teachers and guidance specialists in designing appropriate occupational exploration experiences (Tennyson)

28. plan and provide vocational instruction which prepares students to enter, adjust to, progress in, and change jobs within occupational fields (Tennyson)

29. assist students in identifying a wide range of occupations to which their vocational instruction is applicable (Tennyson)

30. encourage employers to assist in expanding student awareness of career opportunities (Tennyson)

31. arrange observation activities or part-time employment for students and school staff to help them learn more about occupations and work settings. (Tennyson)

In implementing a program of Career/Occupational Education the Guidance Counselor should:

32. use career guidance techniques to demonstrate self-awareness and the decision-making process

33. find an exploratory or experiencial learning situation in the school's environment

34. design a workshop to make others aware of the elements of Career Education

35. infuse affective Career Education concepts into lesson plans

36. mobilize skills which are pertinent to Career Education

37. demonstrate guidance techniques, such as constructing and using rating scales, using role playing, constructing job ladders, interviewing techniques

38. inform community and parents about the goals of Career Education

39. compile a list of resource people in the community and school

40. write & administer questionnaires and conduct interviews for both preparation and follow-up of field trips

(Ohio State Module 5)

In implementing a program of Career/Occupational Education the computer staff will be able to:

41. help students learn about and understand the range of present and potential career opportunities

42. encourage persons in the process of career exploration and decision making to seek out vocational information on their own

43. increase awareness of major sources of occupational information

44. support related programs including Career Education, Career and Employment Counseling and Manpower and Educational Planning

(Ohio State Module 5)

In implementing a program of Career/Occupational Education the members of the support personnel of a school will be able to:

45. assist in the early identification, diagnosis, and remedial treatment of problems which are detrimental to the learning process and to the individual's potentialities

46. take necessary action based on complete information about a student's lifestyle, personal characteristics, work experience, and school and non-school problems and experiences

47. serve as a resource person to teachers in the lower grades

48. provide materials and interpret jobs and job opportunities in their own and related fields

49. help parents understand the relationship between a student's potentiality and his aspirations

(Ohio State Module 5)

In implementing a program of Career/Occupational Education a Teacher Coordinator in a vocational cooperative program will be able to:

50. select and maintain training stations that provide the best possible training for individual students depending on their needs and vocational goals

51. develop a comfortable working relationship with the training sponsor appointed by the employer for each cooperative student

52. design on-the-job learning experiences for cooperative students

53. design participating experiences and/or projects for students who are not in the cooperative program

54. relate classroom instruction to actual on-the-job situations

55. apply principles involved in disseminating information to students and parents regarding vocational education

56. develop policies to serve as flexible guidelines in the selection of students for both the cooperative and the project plans of the program

57. assist student-according to his vocational interest, aptitude, and ability--in selecting the most appropriate on-the-job training placement

(Ohio State Module 5)

In implementing a program of Career/Occupational Education the Librarian will be able to:

58. obtain background in informational services for Career Education

59. work with other school staff in developing a Career Education

60. coordinate student activities in developing a Career Information

61. dispurse to teachers, Career Education materials for classroom use

(Ohio State Module 5)

In implementing a program of Career/Occupational Education a Paraprofessional will be able to:

62. take charge of the career information center

63. assume leadership roles in dealing with preplanned groups

64. maintain and promote school-community relations

65. provide students with materials and information on Career Education and Occupational Education and community services

66. assist staff in their Career Education and Occupational Education programs

(Ohio State Module 5)

In implementing a program of Career/Occupational Education a Principal will be able to:

67. recognize the need for and the importance of a comprehensive program for the students in his own school which is articulated with all others in the system

68. plan for and implement in-service programs designed to provide the instructional and counseling staff with the concepts, procedures, and materials necessary for the accomplishment of Career Education programs

69. model support and reinforcement for the staff, stressing that Career Education is important

70. communicate to the community, through various media the elements of Career Education and the assumptions on which it is based

71. initiate contacts between school and community personnel concerning programs available in local business and industry to support Career Education

(Ohio State Module 5)

In implementing a program of Career/Occupational Education members of the School Committee will be able to:

72. organize a functional program for all students at all grade levels

73. provide funds for facilities, supplies and materials at all grade levels and for employing specialized staff and clerical assistance

74. appoint teachers who are career educationally minded and who can complement the skills and abilities of the present staff

75. encourage in-service preparation and development, by the staff at all grade levels, of skills and competencies in the Area of Career Education

76. influence community to cooperate with Career Education and Occupational Education programs

77. influence media to cover successful Career Education and Occupational Education programs

(1-4: Ohio State Module 5)

In implementing a program of Career/Occupational Education the Superintendent of Schools will be able to:

78. encourage follow-up studies of graduates and non-graduates, community occupational surveys, and self-evaluation studies as aids to meet the needs of the community

79. employ new personnel whose philosophies of Career Education are consistent with those held by the school system and who can supplement the skills, abilities and experiences of the present staff

80. assist the school-board members in their understanding of Career Education

81. accept the fact that a program of Career Education will cost money, that specialized personnel most likely must be employed, that time must be provided for the performance of the program, and that facilities, equipment, supplies, materials and assistance must be provided

82. recognize that it is a long term program, applicable at each grade level

83. provide for in-serivce activities of both present and new staff members

84. involve students and parents in the development of curriculum in Career Education

85. provide students and staff with a Career Information Center

86. investigate, evaluate, and implement various delivery systems such as VIEW (vocational information for education and work) computerized informational systems, games, and simulation activities

87. publicize successful Career/Occupational Education programs

88. promote Career Education and Occupational Education programs to influence members of the community

(1-9: Ohio State Module 5)

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CAREER EDUCATION PERSONNEL MODEL
ELEMENTARY ADMINISTRATION MODEL,
University of Michigan, Ann Arbor, School of Education VT 101028 (No date)

COMPREHENSIVE MODEL (teachers, counselors, administrators)

1. Use community people as career education resource personnel
2. Provide student awareness experiences.
3. Develop interpersonal skills
4. Utilize career oriented materials.
5. Utilize career education inservice training.
6. Utilize individualized motivational systems.
7. Promote student self-evaluation
8. Design optimum career learning environments
9. Involve teachers in revising instructional programs
10. Practice a career ed philosophy
11. Design optimum career learning environments
12. Develop a career education rationale.
13. Define career education concept
14. Evaluate career Ed programs.
15. Plan career oriented instructional facilities.
16. Provide active career education leadership
17. Utilize parent organizations
18. Recruit career oriented staff.
19. Use community people as career education resource personnel
20. Utilize instructional feedback information
21. Involve parent organization in instructional evaluation.
22. Promote student's acceptance of responsibility
23. Utilize career oriented materials.
24. Develop interpersonal skills
25. Utilize decision making components
26. Establish career education performance standards
27. Write teacher selection criteria
28. Identify potential drop-outs
29. Identify career oriented consultant services
30. Establish career education priorities
31. Promote student creativity.
32. Disseminate local career education activities

Newton, Mark, and Feck, Vincent J., "Career Education: A Move Toward Relevance," INTERCAMBIO INTERNACIONAL, Western Kentucky University, Bowling Green, Kentucky, January, 1976, Vol. 1, Number 4.
Career Education Competencies for Elementary Teachers, In Order of Importance.

1. Explain that there is inherent dignity in work
2. Help the students develop self-confidence in their ability to fulfill task responsibilities.
3. Make the students aware of themselves and their present capabilities.
4. Be familiar with various resources available for career education
5. Integrate life experiences of the teacher, students, parents, and available resource people in classroom instruction
6. Provide student with "hands on" experiences to enhance and increase awareness and explore basic skills
7. Help students with personal and social problems that hinder self-awareness
8. Conduct field trips oriented to the world of work
9. Explain the relationship between education and career plans
10. Utilize business and industrial leaders as resource and advisory personnel
11. Understand current concepts of career education and understand your school system's plan for implementing career education
12. Relate the value of basic skills acquisition as necessary foundation for future occupations.
13. Understand your role and the role of superiors and peer groups in career Ed
14. Motivate the student towards thinking about careers
15. Utilize community members, professional, service, social, fraternal, and religious organizations for public relations services
16. Involve students in planning their own unit activities.
17. Develop instructional materials related to career Education.
18. Involve parents in the students' career development.
19. Relate the importance of work in the social and economic development of a society.
20. Develop career based programs for gifted students.
21. Evaluate your own teaching in relation to career Ed objectives.
22. Provide knowledge of the primary needs of man and examples of how they are met through careers
23. Teach communication skills in work and interpersonal situations.
24. Teach appropriate interviewing techniques.
25. Have workable knowledge of audio-visual and teaching aids, especially pertaining to life-centered activities and career Ed.
26. Formulate lessons and behavioral objectives related to career Ed
27. Effectively carry out simulation and role playing in the classroom related to career Ed
28. Develop career based programs for disadvantaged students
29. Create an awareness of changes in world of work
30. Explain how making friends helps to develop a self-concept
31. Explain new teaching methods being used in Career Ed to parents and other concerned personnel
32. Promote career Ed within the home by keeping the parent informed and involved.

Norton, Robert E., Staff Development Guidelines and Procedures for Comprehensive Career Education, Columbus, Ohio: The Center for Vocational Education, Ohio State University, 1975.

CAREER EDUCATION COMPETENCY STATEMENTS FOR ADMINISTRATORS

Competency Statements:

1. Involve teachers in revising instructional programs.
2. Evaluate career oriented curriculum.
3. Sell career education to community.
4. Promote student self evaluation.
5. Publicize career education in the community.
6. Establish student feedback systems.
7. Use pre- and post-assessment techniques.
8. Utilize career education accountability model.
9. Utilize career education inservice training.
10. Practice a career education philosophy.
11. Design optimum career learning environments.
12. Develop a career education rationale.
13. Define career education concept.
14. Evaluate career education programs.
15. Plan career oriented instructional facilities.
16. Provide active career education leadership.
17. Utilize parent organizations.
18. Recruit career oriented staff.
19. Use community people as career education resource personnel.
20. Utilize instructional feedback information.
21. Involve parent organizations in instructional evaluation.

22. Promote student's acceptance of responsibility.

23. Utilize career oriented materials.

24. Develop interpersonal skills.

25. Utilize decision making components.

26. Establish career education performance standards.

27. Write teacher selection criteria.

28. Identify potential drop-outs.

29. Identify career oriented consultant services.

30. Establish career education priorities.

31. Promote student creativity.

32. Disseminate local career education activities.

33. List decision making components.

34. Utilize program review committees.

35. Participate in professional education organizations.

36. Expand world of work experience

37. Implement self learning centers

38. Utilize individualized motivational systems.

39. Provide student awareness experiences.

40. Write career education goals.

41. Design career education skill programs.

42. Design life oriented programs.

43. Monitor economic trends.

44. Develop long range career education plans.

45. Utilize classroom management techniques.

46. Coordinate student placement services.

47. Monitor societal trends.

48. Identify school's role in student placement.

49. Identify cooperative education function.

50. Monitor education trends.

51. Identify area skill center function.

52. Describe career education delivery systems.

53. Identify career education legal aspects.

CAREER EDUCATION COMPETENCY STATEMENTS FOR TEACHERS

Competency Statements:

54. Promote students acceptance of responsibility.

55. Use community people as career education resource personnel.

56. Provide student awareness experiences.

57. Promote student creativity.

58. Develop interpersonal skills.

59. Conduct career oriented field trips.

60. Utilize career oriented materials.

61. Utilize career education inservice training.

62. Utilize problem solving skills.

63. Utilize individual motivational systems.

64. Promote student self-evaluation.

65. Design world of work learning activities.

66. Design optimum career learning environments.

67. Involve teachers in revising instructional programs.

68. Utilize career oriented teaching methods.

69. Utilize career oriented library resources.

70. Expand world of work experience.

71. Implement self learning centers.
72. Practice a career education philosophy.
73. Utilize instructional feedback information.
74. Evaluate career oriented curriculum.
75. Assess student performance strengths.
76 Identify community career oriented resource personnel.
77. Design life oriented programs.
78. Assess student performance handicaps.
79. Provide active career education leadership.
80. Illustrate academic and vocational skill relationships.
81. Establish student feedback systems.
82. Utilize decision making components.
83. Identify occupational requirements.
84. Utilize career oriented simulation techniques.
85. Identify employment opportunities.
86. Identify employment procedures.
87. List decision making components.
88. Use pre and post assessment techniques.
89. Define career education concept.
90. Develop a career education rationale.
91. Develop short range career education plans.
92. Design career education skill programs.
93. Plan career oriented instructional facilities.
94. Utilize program development skills.
95. Determine career development options.
96. Identify occupational clusters.

97. Employ task analysis techniques.

98. Develop long range career education plans.

99. Describe work ethic concept.

100. Coordinate student placement services.

101. Provide student awareness experiences.

102. Define career education concept.

103. Utilize career education inservice training.

104. Utilize individual motivational systems.

105. Involve teachers in revising instructional units.

106. Promote student self evaluation.

107. Evaluate career oriented curriculum.

108. Promote creativity.

109. Utilize problem solving skills.

110. Develop interpersonal skills.

111. Promote students' acceptance of responsibility.

112. Utilize parent organizations.

113. Utilize career oriented materials.

114. Utilize group counseling techniques.

115. Utilize decision making components.

116. Develop a career education rationale.

117. List decision making skills.

118. Utilize career oriented library resources.

119. Provide active career education leadership.

120. Publicize career education in the community.

121. Practice a career education philosophy.

122. Use pre- and post-assessment techniques.

123. Use community people as career education resource personnel.

124. Design world of work learning activities.

125. Write career education performance objectives.

126. Develop a community resource file.

127. Design life oriented programs.

128. Design unduplicated grade level career education curriculum.

129. Conduct career oriented field trips.

130. Participate in professional education organizations.

131. Establish student feedback systems.

132. Expand world of work experience.

133. Establish career education performance standards.

134. Illustrate academic and vocational skill relationships.

135. Identify occupational clusters.

136. Assess student performance strengths.

137. Design optimum career learning environment.

138. Identify avocational and vocational relationships.

139. Develop long range career education plans.

140. Identify potential drop-outs.

141. Identify employment opportunities.

142. Assess student performance handicaps.

143. Determine career development options.

144. Develop career education information service.

145. Identify community career oriented resource personnel.

146. Develop short range career education plans.

147. Identify employment procedures.

148. Identify career oriented consultant services.

149. Disseminate local career education activities.

150. Identify area skill center function.

151. Describe work ethic concept.

152. Utilize instructional feedback information.

153. Identify cooperative education function.

154. Evaluate student's career development plan.

155. Implement self learning centers.

156. Monitor economic trends.

157. Monitor educational trends.

158. Formulate student's career development plan.

CAREER EDUCATIONAL PERSONNEL MODEL,
FINAL REPORT PROJECT NO 8082-C
John T. Odbert, Eugene E. Trotter Co-Directors
School of Education, Univeristy of Michigan, Ann Arbor. 1974

SECONDARY ADMINISTRATOR MODEL

1. Utilize career Education inservice training.
2. Utilize individualized motivational systems.
3. Involve teachers in revising instructional programs.
4. Establish student feedback systems.
5. Provide active career education Leadership.
6. Practice a career education philosophy
7. Utilize career oriented materials
8. Monitor economic trends
9. Establish career education priorities.
10. Evaluate career education programs.
11. Promote students' acceptance of responsibility.
12. Recruit career oriented staff
13. Use community people as career education resources people.
14. Promote student self evaluation.
15. Design optimum career learning environments.
16. Write career education goals.
17. Develop interpersonal skills.
18. Utilize career education accountability model.
19. Provide student awareness experiences.
20. Coordinate student placement services.
21. Utilize decision making components.
22. Monitor societal trends.
23. Sell career education to the community
24. Identify school's role in student placement.
25. Identify cooperative education function.
26. Use pre- and post-assessment techniques.
27. Monitor educational trends
28. Publicize career education in the community
29. Disseminate local career education activities.
30. Design career education skill programs.
31. Identify area skill center function.
32. Describe career education delivery systems.
33. Identify career education legal aspects.
34. Define career education concept.

COMPREHENSIVE MODEL (Teachers, Counselors, Administrators)

35. Use community people as career education resource personnel.
36. Provide student awareness experiences.
37. Develop interpersonal skills.
38. Utilize career oriented materials.
39. Utilize career education inservice training.
40. Utilize individualized motivational systems.
41. Promote student self-evaluation.
42. Design optimum career learning environment.
43. Involve teachers in revising instructional programs.

44. Practice a career education philosophy.
45. Provide active career education leadership.
46. Establish student feedback systems.

CAREER EDUCATION PERSONNEL DEVELOPMENT:
GOALS AND STRATEGIES, GRADUATE AND UNDERGRADUATE PROGRAMS.
Prepared for The U.S. Office of Career Education,
Ohio State University, Columbus; The Center for Vocational Education, July, 1975.

UNIVERSITY TRAINEES WILL:

1. Develop and/or extend knowledge and understanding of relationships among education, careers, culture and lifestyles.
2. Identify a working definition of Career Education
3. Develop an understanding of Career awareness, career exploration and career preparation concepts.
4. Delineate basic principles that underlie career Education
5. Formulate a career ed rationale through identification/understanding of CE principles and Career-related skills
6. Identify major goals of CE
7. Develop long/short range program plans for implementing CE
8. Differentiate between CE and Career Development
9. Identify information to be taught in the study of an occupation; include identification of occupational information, goals, objectives, and skills
10. Identify/differentiate CE resources (references in print and community persons) appropriate/necessary for accessing C information (occupational educational, and personal-social)
11. Extend knowledge and understanding of the world of work, career clusters, or similar content sources regarding career information.
12. Develop and/or extend knowledge and understandings regarding the varied societal segments within a community and identify the implications/relationships of that information about each segment for careers, education, family, lifestyles, and culture.
13. Describe the duties, working conditions, salary ranges, and other special characteristics associated with specific occupations within the Clusters of a Career Cluster system.
14. Develop a knowledge of manpower needs and employment trends at the local state, and national levels.
15. Develop skills and understandings regarding job placement and its implications for planning for teaching-learning.

16. Describe employment procedures used in hiring personnel.

17. Identify and develop understandings of C ed concepts, C Ed roles, and the cooperation needed to implement C Ed as an integral part of Educational experiences within the community.

18. Identify the implications of C Ed for the entire education of each individual student.

19. Develop a knowledge of the historical, philosophical, sociological, and psychological foundations of C Ed concepts.

20. Develop/apply appropriate and varied interpersonal skills necessary for planning and implementing C Ed experiences.

21. Identify, study and supply skills and guidelines designed to reduce worker alienation.

22. Develop a knowledge of intergroup/individual differences in motives, attitudes, values, and social norms and of influence of those differences

23. Develop human relations skills and group counseling techniques to assist students with self awareness/career exploration.

24. Develop skills to collect, analyze, and utilize needs assessment data for the purpose of developing long/and short-term comprehensive C Ed program plans/instruction.

25. Develop an understanding and knowledge of child development as it relates to the world of work.

26. Identify C Ed goals and objectives based on Career Development concepts appropriate to child/adolescent growth and development.

27. Develop a knowledge/conceptualization of the role of practicing staff members to achieve institutional C Ed goals and objectives.

28. Develop a rationale for infusing C Ed into the curriculum.

29. Identify the factors which influence Career choice.

30. Develop/demonstrate an understanding of decison/making and problem solving skills as they relate to career choice and Career preparation.

31. Develop skills needed to act as a liaison and resource person to the community to keep the community informed of new developments in C Ed.

32. Develop leadership skills for implementing C Ed in the school/community.

33. Identify/exhibit attitudes and behaviors toward careers which enhance student (K-12) self-concept development.

34. Develop career Ed goals for infusion into a local school system program.

35. Develop skills in planning and implementing student placement services

36. Develop skills in conducting follow-up studies of former students (drop-outs, graduates, and the like) to provide relevant data for improving career placement services.

37. Develop an understanding and knowledge of the financial requirements of C Ed.

38. Identify/develop an understanding of equality concepts and roles in C Ed as they relate to past and present race and sex stereotyping and trends among cultures and in work.

39. Identify financial resources in a local education agency needed to support a total C Ed program.

40. Maintain liaison with state department offices (Education, finance, labor, and the like) for long-short-range C Ed planning.

41. Clarify developmental tasks and roles of persons implementing C Ed.

42. Establish communications among career Ed personnel regarding developmental roles and tasks of persons implementing C Ed (K-12)

43. Organize/coordinate school and community understanding and support for C Ed experiences/instruction for youth.

44. Maintain liaison with community groups/activities significant to C Ed planning and implementation.

45. Plan/arrange for wide community participation in C Ed policy decision making.

46. Plan/design/establish staff development in-service programs for C Ed.

47. Develop leadership skills in supervision/coordination of C Ed curriculum development and implementation which builds in articulation, quality, and improvement of instruction.

48. Develop/coordinate "team efforts" (educators and community persons) in planning/implementing C Ed personnel development programs.

49. Develop/coordinate/implement "team efforts" among school/community personnel in the teaching learning process--instruction and/or performance experiences in C Ed.

50. Develop a sound financial management plan for C Ed at the local level.

51. Identify and/or plan and establish appropriate placement and referral services for students (K-12).

52. Develop curriculum goals and objectives which pertain to C Ed.

53. Develop C Ed objectives in the cognitive, affective, and psychomotor domains.

54. Revise existing instructional programs (K-12) such that C Ed goals and objectives are specified for various grade levels.

55. Develop learning activities which infues-integrate career awareness, Career exploration, Career preparation concepts into appropriate levels of a curriculum.

56. Involve students and community in the design/implementation of Career oriented instruction.

57. Plan/implement learning experiences which are integrated with respect to education, careers, culture, home, family and lifestyles.

58. Plan/implement learning experiences which provide the opportunity to distinguish among the interdependent relationships of academic, vocational, and C Ed skills and understandings.

59. Develop curricula that include the self-analysis/self-evaluation process in career awareness, career exploration, and career preparation.

60. Develop units of instruction involving basic information about the world of work.

61. Develop self-awareness experiences through which students can determine the assistance/resources needed to meet their career goals.

62. Design/implement individualized instructional units oriented for student career awareness, career exploration, and career preparation.

63. Plan/implement instruction which will develop student (K-12) awareness of both past and present trends of sex roles in the work world and of the effect(s) changing trends may have on family responsibilities/roles in the home.

64. Design/implement valuing experiences which pertain to C Ed concepts.

65. Plan/implement Career-related experiences wherein students develop Career related experiences where in students develop career research skills.

66. Plan/implement learning activities which involve problem-solving and decision-making skills in relation to C Ed.

67. Plan/implement group interaction career-related experiences for developing skills required to perform satisfactorily working with others.

68. Plan/implement career-related learning activities which develop/extend student (K-12) psychomotor skills.

69. Plan/implement career-related observation, participation, and on-the-job learning experiences.

70. Design-implement career learning experiences which involve varied interactions between school community personnel/organizations/institutions.

71. Design/implement C Ed experiences and programs involving varied segments of society within the community.

72. Plan/implement C Ed experiences within varied geographic settings.

73. Plan/organize/schedule school and work experiences, which are consistent with programs of the school and the employer, to meet the needs of the student employee, the school and the employer.

74. Develop learning activities that involve disadvantaged, minority, gifted and talented, and handicapped students in C Ed.

75. Utilize reinforcement techniques in teaching career awareness, career exploration, and career preparation activities related to self concept.

76. Utilize Career-Related Group activities to develop the group leadership and followership potential of students.

77. Utilize simulation, role-playing, and gaming experiences appropriate for Career Awareness, career Exploration, and career preparation activities.

78. Utilize "hands-on" experiences appropriate for career education activities.

79. Develop/organize/utilize a community resource file to develop career education instruction.

80. Identify/involve community personnel (e.g. senior citizens; those in business, industry, labor, parents, those in professions within and outside education) in career education teaching-learning experiences.

81. Educate and involve the total community through communications, models, and media about career ed activities.

82. Identify/utilize materials, facilities, and equipment (in and outside of school) necessary for Career Ed.

83. Gather/develop/utilize/disseminate career-oriented resource materials (books, pamphlets, tapes, filmstrips, etc.) for use by students, teachers, and other community persons.

84. Identify and provide a rationale for the role and function of evaluation in career Ed.

85. Identify/describe the basic components of a comprehensive career education evaluation system.

86. Establish criteria and apply skills for evaluating lessons, units, courses, and programs in career education.

87. Develop skills needed to utilize assessment techniques in the evaluation of career ed activities.

88. Compare and assess/evaluate/modify self-evaluation instruments for use in career education experiences.

89. Administer, score, and interpret existing and/or developed evaluation instruments for career education.

90. Develop skills to create self-instructional career education packages

91. Identify/develop self-evaluation skills for career awareness, career exploration.

92. Develop/demonstrate the procedures and skills to assist students (K-12) IN ASSESSING THEIR career interests, abilities, values, and needs.

93. Identify/design/implement varied objective and subjective evaluation techniques for determining student (K-12) understanding of career awareness, career exploration, and career preparation activities.

94. Identify techniques to assess performance skills in career awareness, career exploration and career preparation.

95. Evaluate student performances with instrumentation items based upon the stated career education goals and objectives and determine correlations between objectives and performances.

96. Utilize program/curriculum review committees to evaluate curriculum goals and objectives based upon career development concepts/criteria appropriate for each grade level (K-12).

97. Identify/design/implement instrumentation utilized to determine the level(s) of a student's career development (K-12).

98. Develop/demonstrate methods for assessing pupil growth in the ability to work with others in varied career education experiences.

99. Analyze and utilize career education needs assessment data for instructional planning.

100. Identify/develop needs assessment instrumentation for career education and develop techniques necessary to implement needs assessment instruments for career education programs planning.

101. Collect/analyze/relate employer and student data to determine the needs of both and to plan to meet those needs.

102. Collect/assess/evaluate print and non-print career education materials/resources for students and career education personnel.

103. Develop techniques for identifying prospective student choices/plans for entry into specific career preparation (Vocational/technical) classes.

104. Evaluate career education as an integral part of education.

105. Identify techniques and evaluation designs for evaluating career-orientated curriculum and programs.

AN INTRODUCTION TO CAREER EDUCATION: A Policy Paper of the U.S. Office of Education. Kenneth B. Hoyt, Director, Office of Career Education. U.S. Dept. of Health, Education and Welfare, Publication No. (OE) 75-00504. Washington, D.C., 1975.

CAREER EDUCATION COMPETENCIES

A. All classroom teachers will:

1. Devise and/or locate methods and materials designed to help pupils understand and appreciate the career implications of the subject matter being taught.

2. Utilize career-oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation.

3. Help pupils acquire and utilize good work habits.

4. Help pupils develop, clarify, and assimilate personally meaningful sets of work values.

5. Integrate, to the fullest extent possible, the programmatic assumptions of career education into their instructional activities and teacher-pupil relationships.

B. Some teachers, in addition, will be charged with:

6. Providing students with specific vocational competencies at a level that will enable them to gain entry into the occupational society.

7. Helping students acquire job-seeking and job-getting skills.

8. Participating in the job-placement process.

9. Helping students acquire decision-making skills.

C. The business-labor-industry community will:

10. Provide observational, work experience, and work-study opportunities for students and for those who educate students (teachers, counselors, and school administrators).

11. Serve as career development resource personnel for teachers, counselors, and students.

12. Participate in part-teim and full-time job placement programs.

13. Participate actively and positively in programs designed to reduce worker alienation.

14. Participate in career education policy formulation.

D. Counseling and guidance personnel will:

15. Help classroom teachers implement career education in the classroom.

16. Serve, usually with other educational personnel, as liaison between the school and the business-industry-labor community.

17. Serve, usually with other educational personnel, in implementing career education concepts within the home and family structure.

18. Help students in the total career development process, including the making and implementation of career decisions.

19. Participate in part-time and full-time job placement programs and in follow-up studies of former students.

E. The home and family members with whom pupils reside will:

20. Help pupils acquire and practice good work habits.

21. Emphasize development of positive work values and attitudes toward work.

22. Maximize, to the fullest extent possible, career development options and opportunities for themselves and for their children.

F. Educational administrators and school boards will:

23. Emphasize career education as a priority goal.

24. Provide leadership and direction to the career education program.

25. Involve the widest possible community participation in career education policy decision making.

26. Provide the time, materials, and finances required for implementing the career education program.

27. Initiate curriculum revision designed to integrate academic, general, and vocational education into an expanded set of educational opportunities available to all students.

IMPROVE INSTRUCTIONAL CAPABILITIES OF PART TIME VOCATIONAL EDUCATION CALL STAFF, FINAL REPORT. University of Wisconsin - Stout, Menomonie, Wisconsin. Center for Vocational-Technical and Adult Education, September, 1974. ED 112-263, CE 005289.

TOOLS FOR TEACHING

As instructors, we must learn:

1. To prepare and present a lesson.
2. To use correct teaching methods.
3. To use individual and group instruction as methods of instruction.
4. To learn the art of oral questioning in teaching.
5. To use the blackboard, instruction sheets and other teaching aids.
6. To recognize the importance of personal qualities of an instructor.
7. To recognize and provide for individual differences in the group.
8. To learn the responsibilities of the instructor as a manager.
9. To check the effectiveness of our teaching.

APPENDIX F

Sample Career Education Competency Questionnaire

Note: Six questionnaires were used in this study; one for each personnel category for career education. All questionnaires gathered the same demographic data and used the same scales; the competencies differed in each category. The questionnaire in this appendix was used for elementary school personnel. For specific competencies in the other questionnaires refer to the career education competency lists in Chapter Three.

CAREER EDUCATION COMPETENCY ANALYSIS

The purpose of this analysis is to synthesize and validate competencies needed by school system personnel to implement career education. This study is an outgrowth of reviews of the literature currently identifying the skills needed by career educators at various levels. We would like information on the importance of each competency on the list and an indication of the frequency of actual use of each of the competencies. This study is being conducted by the Department of Business and Career Education at Boston University, under the auspices of the National Association for Career Education.

The following list represents a synthesis of competencies derived from prior research. Since your current career education activities are at this level, we are asking for your help in validating this list. We appreciate your cooperation and thank you for taking the time necessary to carefully complete this questionnaire. NOTE: I am filling out this statement of my own free will and I understand that my name will not be used in the final reporting of this data and that only group data will be reported. I understand that the final results of this study will be made available to me if I provide my name and address on the lines below:

NAME: ______________________________

ADDRESS: ______________________________

PLEASE RETURN THIS QUESTIONNAIRE TO THE NACE BOOTH or return it by mail to:

Joyce Malyn-Smith
Department of Business and Career Education
Boston University
765 Commonwealth Avenue, Room 1510
Boston, Massachusetts 02215

PLEASE COMPLETE THE FOLLOWING DEMOGRAPHIC DATA:

1. What is the scope of the career education program in which you are currently involved?

____	____	____	____	____	____	____	____	____	____
none	by myself	expanded guidance program	part of occ/vo ed.	K-12	5-9	6-12	9-12	higher ed.	business industry gov't.

2. In what region of the country are you currently employed?

____	____	____	____	____	____
northeast	south	middle atlantic	midwest	southwest	west

3. What is your job title?

____	____	____	____	____	____	____
teacher	guidance	work/study coop.coord	career ed coord.	occ/vo coord.	career ed director	occ/vo ed director
____	____	____	____	____	____	
asst. principal	principal	asst. Suptdent	superintendent	teacher educator	other (please indicate)	

4. Your current degree status?

____	____	____	____	____	____	____	____
less than BA - BS	BA - BS	BS+ BA+	MA MEd	MEd+	CAGS	CAGS+	EdD PhD

5. Year of most recent degree:

prior to 1960   60-64   65-69   70-72   73-76

6. Number of years of teaching experience:

0-2   3-5   6-10   11-15   16-20   20+

7. Number of years experience in business-industry-labor, civil service (full-time equivalent)

0-1   2   3   4   5   6-8   9-12   12+

8. How long have you personally been involved in implementing career education in your school district??

0-1 yrs.   2 yrs.   3 yrs.   4 yrs.   5 yrs.   6-8 yrs.   8+ yrs.

DIRECTIONS: On the list which follows after each competency statement, please CIRCLE the NUMBER of the written description which most closely matches your point of view. Note that we want you to rate competencies by importance and frequency of use and a column titled "not familiar with topic" has been provided.

IMPORTANCE	FREQUENCY
5. critical	5. performed daily
4. important	4. performed regularly
3. somewhat important	3. performed on occasion
2. of little importance	2. not performed
1. of no value	1. performed by someone else in program

CURRICULUM DEVELOPMENT

Assist in writing general career education program objectives.	critical	important	somewhat important	of little importance	of no value	Not familiar with topic	performed daily	performed regularly	performed on occasion	not performed	perfomed by someone else in the program
Write specific career education performance objectives for curriculum units.	5	4	3	2	1	NF	5	4	3	2	1
Identify, evaluate and use appropriate commercial materials designed to help pupils perceive the career implications of the subject matter taught	5	4	3	2	1	NF	5	4	3	2	1
Review and evaluate career education curricula designed and developed by other schools	5	4	3	2	1	NF	5	4	3	2	1
Develop teacher-produced materials designed to help pupils perceive the career implications of the subject matter taught.	5	4	3	2	1	NF	5	4	3	2	1
Design and develop facility modifications to optimize career learning environments such as career corners, activity centers, bulletin boards etc.	5	4	3	2	1	NF	5	4	3	2	1
Assist in the development and procurement of materials for a school-wide career resource center	5	4	3	2	1	NF	5	4	3	2	1
Infuse "hands-on" (action-oriented) experiences in the curriculum to relate academic subject learnings to the world of work.	5	4	3	2	1	NF	5	4	3	2	1
Engage in interdisciplinary experiences integrating academic learnings to increase career awareness and explore basic skills.	5	4	3	2	1	NF	5	4	3	2	1
Integrate academic and occupational information in the curriculum through activity centers and/or units of instruction	5	4	3	2	1	NF	5	4	3	2	1
Work with guidance staff to implement and improve the career awareness and/or exploration program	5	4	3	2	1	NF	5	4	3	2	1
Engage in classroom-oriented research to validate and measure the effectiveness of the career education activities	5	4	3	2	1	NF	5	4	3	2	1

CAREER DEVELOPMENT - MATURITY

Help students develop positive attitudes toward themselves, others, work and those who work to build personally meaningful sets of work values

	critical	important	somewhat important	of little importance	of no value	Not familiar with topic	performed daily	performed regularly	performed on occasion	not performed	perfomed by someone else in the program
Provide student awareness experiences stressing present capabilities and interests	5	4	3	2	1	NF	5	4	3	2	1
Help students develop self-confidence in their ability to fulfill task responsibilities and improve self-esteem	5	4	3	2	1	NF	5	4	3	2	1
Help students with personal and social problems that hinder self-awareness	5	4	3	2	1	NF	5	4	3	2	1
Relate the value of basic skills acquisition as a necessary foundation for future occupations	5	4	3	2	1	NF	5	4	3	2	1
Identify and use appropriate measuring devices for students to use in assessing their interests, attitudes and aptitudes relating to career decisions	5	4	3	2	1	NF	5	4	3	2	1
Develop experiences which will avoid occupational stereotypes including glamorous occupations and sex-role stereotypes	5	4	3	2	1	NF	5	4	3	2	1
COMMUNITY RELATED											
Conduct career-oriented field trips	5	4	3	2	1	NF	5	4	3	2	1
Integrate life experiences of teachers, students, parents and resource people in the classroom instruction to provide new models of behavior and work roles	5	4	3	2	1	NF	5	4	3	2	1
Involve parents in students career development	5	4	3	2	1	NF	5	4	3	2	1
Identify and utilize resources and/or services available from the community for enriching the career awareness and/or exploration program	5	4	3	2	1	NF	5	4	3	2	1

STAFF DEVELOPMENT Become engaged in experiences which will familiarize yourself with the implications of your subject matter to career education	critical	important	somewhat important	of little importance	of no value	Not familiar with topic	performed daily	performed regularly	performed on occasion	not performed	perfomed by someone else in the program
Participate in career education in-service training	5	4	3	2	1	NF	5	4	3	2	1
Expand your world of work experiences to promote a broader experiential base for teachers in implementing career education	5	4	3	2	1	NF	5	4	3	2	1
Increase your interpersonal skills in working with a broad spectrum of individuals both within the school and throughout the community	5	4	3	2	1	NF	5	4	3	2	1
OCCUPATIONAL INFORMATION AND ACTIVITIES	5	4	3	2	1	NF	5	4	3	2	1
Identify technical competencies and general skills needed for entry into occupations	5	4	3	2	1	NF	5	4	3	2	1
Relate what students learn in a particular subject area to future education and occupational alternatives, work and living	5	4	3	2	1	NF	5	4	3	2	1
Direct students in obtaining information on manpower from the local, state employment services	5	4	3	2	1	NF	5	4	3	2	1
Provide library and research skills for obtaining career, occupational and educational information from such centralized sources as the DOT and through specific methods such as writing letters to employers	5	4	3	2	1	NF	5	4	3	2	1
PHILOSOPHY Explain to students et al the career education program	5	4	3	2	1	NF	5	4	3	2	1
Describe the total career education program, state the goals within your school district and identify your role within the total plan	5	4	3	2	1	NF	5	4	3	2	1
Foster a climate of cooperation among the faculty to provide broader experiences for the students	5	4	3	2	1	NF	5	4	3	2	1

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